CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, July 22, 1909.

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CONSTRUCTION NEWS.

Plans and Specifications on File.

(* *denotes that this work is advertised in Engineering News.*)

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.	Work. Place.		See issue.
7-24	Engines, etc., Phila., Pa......	(S.)	6-24
7-24	Pavements, Boston, Mass....	(S)	7- 1
7-26*	Pavement, Kenova, W. Va.	(S.)	7- 1
7-26*	Sidewalks, etc., Hohokus, N. J.	(P. & S.)	7-15
7-27*	Bridge, Clinton, Me...	(P. & S.)	7- 1
7-27	Power plant, Greenville, Tex.	(S.)	7-15
7-30	Wasteway, Sunnyside, Wash..	(S)	7- 1
7-31	Buildings, Annapolis, Md....	(S.)	7- 8
7-31	Improv. bldg., Boston.......	(S.)	7- 8
7-31*	Sidewalk, etc, Galveston, Tex.	(S.)	7- 1
7-31*	Dredging, Galveston, Tex...	(S.)	7- 1
7-31	Repairing bldg., Wash., D. C.	(S.)	7-15
8- 2*	Generating station, Winnipeg, Man.	(P. & S.)	6-10
8- 5*	Dredging, Galveston, Tex...	(S)	7- 8
8- 7	Track, Norfolk, Va.........	(S)	7-22
8- 7	Building, Norfolk, Va......	(S.)	7-22
8-14	Street paving, Philadelphia, Pa.	(S.)	7-22
8-14	Hospital, New York........	(S.)	7-22
9- 1*	Park system, Minneapolis, Minn.	(S.)	7- 8
9-14*	Pumping engines, Detroit, Mich.	(P. and S.)	7-15

List of Contracts Pending.

LIGHT, HEAT AND POWER PLANTS.

7-24	Engines, etc., Philadelphia, Pa..	6-24
7-27*	Power plant, Greenville, Tex.....	7-15
7-28	Power bldgs., Toronto, Ont......	7-22
8- 2	Lighting, Cynthiana, Ky........	7-15
8- 2*	Generating station, Winnipeg, Man.	6-10

BRIDGES.

7-23	Steel bridge, Lock Haven, Pa....	7-15
7-24	Repairing bridge, Troy, Ohio....	7-22
7-26	Steel bridge, Winthrop, Wash...	7-22
7-26	Concrete bridge, Yonkers, N. Y.	7-22
7-26	Bridge, Youngstown, Ohio.......	7-15
7-27*	Bridge, Clinton, Me...........	7- 8
7-28	Bridge repair, Cincinnati, Ohio..	7- 8
7-30	Bridge, Findlay, Ohio..........	7-15
7-30	Steel girder bridge, Harrisburg, Pa	7-22
7-31*	Removing bridge, Wash., D. C...	7-22
8- 1	Steel, concrete bridge, Woodford, Va.....................	7-22
8- 2*	Bridge work, Bangor, Me........	7-22
8- 2	Steel bridge, Quincy, Fla.......	7-22
8- 2	Wooden bridge, Meriden, Miss..	7-22
8- 2	Bridge, Zanesville, Ohio.........	7-15
8- 3	Bridge, Toronto, Ont...........	7-22
8- 9	Bridge, Springfield, Ohio........	7-22
8-16*	Concrete bridge, Phoenix, Ariz..	7-22
8-11	Concrete bridge, Cleveland, O....	7-15
8-17	Bridge, Rumford, Me..........	7-22
8-28*	Steel or concrete bridge, Sebec, Me.....................	7-15

BUILDINGS.

7-23	Refinery bldg., Ottawa, Ont......	7-15
7-24	School, Arlington, Ind..........	7- 8
7-24	Quarters, etc., Annapolis, Md....	7- 1
7-24	Building, New York............	7- 1
7-26*	Post-office, Platteville, Wis......	6-24
7-26	Engine houses, New York........	7-15
7-27	Hospital, Ft. Snelling, Minn.....	7-15
7-27	Post-office, Owensboro, Ky......	6-24
7-28	Masonic temple, Sharon, Pa.....	6-17
7-28	Post-office, Hudson, N. Y........	7- 1
7-29*	Post-office, Belleville, Ill........	7- 1
7-29	School, Essex, Conn............	7-22
7-29	Police station, New York........	7-22
7-31	Univ. bldg., Norman, Okla.......	7-22
7-31	Improving bldg., Boston, Mass...	7- 8
7-31	Hospital bldgs., Annapolis, Md...	7- 8
7-31	Repairing bldg., Washington, D. C	7-15
8- 2*	Repairs, etc., Ft. Monroe, Va....	7-15
8- 2	Post-office, Eagle Pass, Tex.....	7- 8
8- 2	Fire houses, New York..........	7-22
8- 3	Schools, New York	7-22
8- 3	Post-office, Council Bluffs, Ia....	7- 1
8- 4*	Post-office, Bowling Green, Ky..	7- 1
8- 5	Post-office, Gonzales, Tex.......	7-15
8- 5*	Buildings, China.	5-27
8- 7	Building, Norfolk, Va...........	7-22
8-12	Quarters, Ft. Morgan, Ala.......	7-22
8-14	Hospital, New York............	7-22

WATER-WORKS.

7-23	Reservoir, Eau Claire, Wis.......	7-22
7-23	Water pipe, etc., Youngstown, Ohio	7-22
7-26*	Filter plant, Burlington, N. J...	6-24
7-27*	Pumping engine, Providence, R. I.	7- 8
7-27	Foundation, Waterbury, Conn...	7-15
7-27	Water-works, Osage City, Kan..	7-15
7-28	Water-works Carl Junc., Mo....	7-15
7-29	Water mains, New York..........	7-22
7-30	Wasteway, Sunnyside, Wash.....	7- 1
7-31	Canals, etc., Malta, Mont.......	7-22
8- 2	Water, sewer system, Ft. St. Philip, La.....................	7-15
8- 2	Well, Clarendon, Ark...........	7-15
8- 3	Filters, etc., Chester, S. C.......	7-22
8- 4	Pressure gages, New York......	7-22
8- 5*	Canal, etc., Scottsbluff, Neb.....	7-22
8- 7*	Fire hydrants, Washington, D. C..........................	7-22
8- 9*	Water system, Lamar, Colo......	7-22
8-16*	Water-works material, Bradford, Ohio	7-22
8-16*	Reclamation work, North Yakima, Wash.................	7-15
8-16	Supplies, Victoria, B. C..........	7-15
9-14	Pumping engines, Detroit, Mich.	7-15
No date	Reservoirs, etc., Lyon, Miss...	7-15

SEWERS.

7-23	Sewer, Louisville, Ky............	7-15
7-23	Sewers, Logan, Utah............	7- 8
7-23	Sewers, Kane, Pa................	7-22
7-24	Sewers, Siverly, Pa.............	7-15
7-26	Sewer, Port Clinton, Ohio.......	7-15
7-26	Sewers, Atlantic City, N. J......	7-15
7-26*	Sewer, Columbus, Ohio..........	7-15
7-26	Sewers, Fort Dodge, Iowa.......	7-22
7-26	Sewers, Cincinnati, Ohio	7-22
7-26	Sewers, Struthers, Ohio	7-22
7-27	Sewers, Bedford, Iowa..........	7-22
7-27	Sewers, Mobile, Ala.............	7- 8
7-28	Sewers, New York.............	7-15
7-28	Sewer, Nashville, Mich	7-22
7-30	Sewers, Lebanon, Ind...........	7-22
8- 2	Sewers, Canby, Minn...........	7-22
8- 2	Sewer extension, Grenada, Miss.	7-22
8- 3*	Sewers, Rahway, N. J...........	7-22
8- 3	Sewers, Monticello, Ark.........	7-15
8- 3	Sewer system, Chandler, Okla....	7-15
8- 3	Septic tank, Hopkinsville, Ky....	7-15
8- 7	Sewer laterals, Evansville, Ind..	7-22
8- 9	Drainage system, Atlantic City, N. J	7-22

STREETS AND ROADS.

7-22	Road work, Hartford, Conn.....	7-22
7-23	Paving, Van Wert, Ohio	7-22
7-23	Resurfacing, Columbus, Ohio....	7-22
7-23	Pavement repair, Buffalo, N. Y..	7-22
7-23*	Paving, etc., Matteawan, N. Y...	7-15
7-23	Pike, Cincinnati, Ohio...........	7- 8
7-24	Pavements, Boston, Mass........	7- 1
7-24	Pavement, Montezuma, Iowa....	7-22
7-24	Grading, etc., Terre Haute, Ind..	7-22
7-24	Road, Basic City, Va............	7-22
7-26*	Pavement, etc., Grinnell, Iowa..	7-22
7-26*	Sidewalks, etc., Hohokus, N. J..	7-15
7-26	Surfacing, etc., Hudson, N. H...	7-22
7-26*	Pavement, Kenova, W. Va.......	7- 1
7-26	Paving, Huntington, W. Va......	7- 8
7-26*	State roads, Baltimore, Md.......	7-15
7-26	Walks, Midland, Ont..	7-15
7-26	Boulevard, Los Angeles, Cal.....	7-15
7-26	Roads, Toledo, Ohio........... .	7-15
7-26	Roads, Wauseon, Ohio.....	7-15
7-27	Paving, etc., Mobile, Ala.........	7- 8
7-27	Paving, New York..............	7-15
7-27	Resurfacing, Hamilton, Ohio....	7-22
7-27	Road impvt., Ellicott City, Md.	7-22
7-27	Road surfacing material, New Brighton, N. Y................	7-22
7-28*	Paving, Meadville, Pa...........	7-22
7-28	Road, Cleveland, Ohio....	7-15
7-28	Street impvt., Albany, N. Y.....	7-22
7-29	Sprinkling oil, New York........	7-15
7-29	Resurfacing, New York	7-22
7-31	Concrete walks, Philmont, N. Y.	7-22
7-31	Road, Findlay, Ohio	7-15
7-31*	Sidewalk, etc., Galveston, Tex....	7- 1
8- 2	Gravel road, Danville, Ind.......	7- 8
8- 2	Macadam, Morristown, N. J.....	7- 8
8- 2	Quarry machinery, etc., Los Angeles, Cal	7-15
8- 2	Gravel road, Danville, Ind.......	7-15
8- 2	Road, Vernon, Ind.	7-15
8- 2*	Paving, Boise City, Idaho......	7- 8
8- 2*	Paving, etc., Norfolk, Va.........	7-15
8- 2	Roads, Greencastle, Ind.........	7-22
8- 2	Broken stone, Los Angeles, Cal..	7-22
8- 2	Sidewalks, Goldsboro, N. C......	7-22
8- 3	Road, Paoli, Ind................	7-22
8- 3	Road, Versailles, Ind............	7-22
8- 3	Highway, Crawfordsville, Ind....	7-22
8- 3	Stone roads, Fowler, Ind........	7-15
8- 3	Macadam, Versailles, Ind........	7-15
8- 4	Macadam, Somers Point N. J...	7-15
8- 4	Crosswalks, etc., Brooklyn, N. Y..	7-22
8- 6	Highway repairs, etc., Albany, N. Y	7-22
8- 6*	Paving, Lansdowne, Pa..........	7-22
8- 9*	Paving, Great Falls, Mont......	7-15
8-14	Street paving, etc., Philadelphia, Pa	7-22

MISCELLANEOUS.

7-23	Paint, Leavenworth, Kan.......	7-15
7-24	Ditch, Frankfort, Ind.	7-15
7-26*	Dredging, Saginaw, Mich.......	7-15
7-26	Passenger coaches, Panama......	7-22
7-26	Piles, stringers, etc., Panama...	7-22
7-27*	Jetty, Wilmington, Del.	7- 8
7-28*	Garbage furnace, Monessen, Pa..	7-22
7-29	Wire fence, New York	7-22
7-28*	Lock pit, Detroit, Mich..........	7- 1
7-29	Dredge boat machinery, Columbus, Ohio	7-22
7-29	Revetment, dredging, Nat'l Soldiers' Home, Va.............	7-22
7-30	Ditches, St. Paul, Minn.........	7-22
7-31*	Dredging, Galveston, Tex.........	7- 1
8- 3	Ditches, Hampton, Iowa.........	7-22
8- 3	Barge canal, Albany, N. Y......	7-15
8- 3	Hose, reels, etc., St. Henry, O..	7-22
8- 4	Fences, Ft. Myer, Va...........	7-22
8- 4	Fencing, New York.............	7-22
8- 5*	Dredging, Galveston, Tex........	7- 8
8- 7	Track, Norfolk, Va.............	7-22
8- 9*	Dredging, Galveston, Tex.......	7-22
8- 9*	Dredging, Oswego, N. Y.........	7-22
8- 9	Drain, Des Moines, Ia...........	7-15
8- 9*	Dredging, Wilmington, Del......	7-22
8-10*	Snagboat, Dallas, Tex..........	7-22
8-16*	Dikes, revetment, Kansas City, Mo.	7-22
8-18	Battleships, Washington, D. C...	6-24
9- 1*	Park system, Minneapolis, Minn.	7- 8
9-28	Vacuum system, Pierre, S. Dak.	7-15

EXAMINATIONS.

7-31	Asst. C. E., Albany, N. Y......	7-15
7-31	Rodman, Albany, N. Y..........	7-15
8- 3	Asst. Engr., New York, N. Y....	6-24

RAILWAYS.

(* *denotes that this work is advertised in Engineering News.*)

CANADIAN PACIFIC.—This company has filed plans for the extension of the Nicola, Kamloops & Simalkameen R. R. from Merritt to Simalkameen, B. C.

The Railroad Commission has approved route maps for the following lines: the Manitou branch and the Moosejaw branch.

CHICAGO, BURLINGTON & QUINCY.—Construction will begin soon, it is announced, on an extension from Herrin, Ill., south to Metropolis, on the north bank of the Ohio River, 57 miles, and to have the line ready for operation early next year. The Herrin Southern Ry. Co. was recently incorporated in Illinois with a capital of $100,000 to carry out this work. The incorporators are D. Willard, D. A. Howard and L. V. Larson, of Chicago; F. E. Ward, of Evanston, and J. N. Dering, of La Grange. Noted last week.

DAKOTA SOUTHERN.—We are officially advised that construction contracts will be let about Aug. 1. Survey is being made and right-of-way secured. Capital is ready. The line will run from Dickinson, N. Dak., to Williston, Minot and Rapid City, S. Dak., 510 miles. Chas. F. Merry is Pres., Dickinson, N. Dak. Noted June 24.

DENVER & MEMPHIS.—A railroad will be constructed by this company from Coffeyville, Ark., via Cherokee City, Bloomfield and Gentry to Fayetteville. Company is securing bonus and right-of-way from Cherokee City to the Illinois River, 14 miles. Also right-of-way and terminal site at Gentry. O. W. Patterson, L. H. Griffin and L. E. Sheldon, of Gentry; Tom Dickson, of Cherokee City; Albert Wilson, of Bloomfield; R. J. Simpson, of Felker, and Britt Smith, of Illinois River, are interested.

ELDORADO, MARION & SOUTHWESTERN.—Capital has been obtained for construction of the extension from Marion, Ill., to Eldorado, 30 miles. It is stated that contracts will be let soon. P. B. Wilson, Marion, is Ch. Engr. Noted on Feb. 18.

FORT SMITH, ARKOMA & SOUTHWESTERN.—Surveys have been made by T. A. Bailey, of Fort Smith, Ark., for the first two miles of this proposed line. As noted last week, this railroad will run from Fort Smith southwest via Panama, Okla., to Wilburton, about 64 miles. Work is now under way on the terminals. W. F. MAY & CO. have the contract for building the first mile. There will be one steel bridge. A. J. Yoke, Fort Smith, is Pres.

GARVIN & NORTHWESTERN.—Preliminary surveys will be completed about Aug. 1. The proposed line is from Garvin to Dexter, Okla., 55 miles; also branch to Eagletown, 25 miles. E. E. Busby, Vice-Pres. of the Choctaw Lumber & Veneer Co., at Garvin, Okla., is interested. Noted on June 3.

HERRIN SOUTHERN.—See Chicago, Burlington & Quincy.

JAMES RIVER VALLEY & NORTHWESTERN.—Incorporated in South Dakota, with headquarters at Huron, to build from Blunt, S. Dak., on the Chicago & Northwestern Ry., north via Onida, to Gettysburg, 35 miles. Capital, $5,000. The incorporators include M. Hughitt, B. S. Cleveland, W. A. Gardner, J. M. Whitman and J. D. Caldwell, of Chicago, and A. K. Gardner, of Huron.

LEMHI & SALMON VALLEY.—See Oregon Short Line.

NORTHERN PACIFIC.—Bids have been received for the Missoula, Mont.-Koaskia, Idaho, division, known as the Lolo Pass cut-off. Estimated cost, $5,000,000.

OKLAHOMA CITY JUNCTION RY.—This line will be a standard-gage belt line, ten miles long, at Oklahoma City, Okla. Contracts have not been let. T. E. Wilson is Pres.; C. M. Macfarlane, Secy. and Treas. E. F. Bisbee is Gen. Mgr., 217 La Salle St., Chicago.

OREGON & EASTERN.—Bids have been invited for building 59.48 miles of Harriman's Oregon & Eastern Ry., which is to extend from Natron to Klamath Falls, 198.6 miles, according to the New York "Commercial." Of the work, now to be put under way, 34.24 miles will be southerly from Natron, and the remainder northerly from Klamath Falls. Cost will be approximately $2,225,000, as a mountainous and heavily timbered country is to be covered, from Natron, and will exhaust the appropriation heretofore made for the undertaking. G. W. Boschke is Ch. Engr., Portland, Ore.

OREGON SHORT LINE.—No date has been set for the construction of the Lemhi & Salmon Valley Ry., recently incorporated. The projected route is from Lewiston southeast along the Little Salmon River, thence east along the Salmon River to Salmon, 280 miles; thence south to Cerro Grande, 148 miles, with branches as follows: From Salmon City southeasterly to Challis, 51 miles; from a point about 40 miles north of Cerro Grande east to Camas, 35 miles. W. H. Bancroft is Pres., and William Ashton, Ch. Engr., Salt Lake City, Utah. Noted last week.

*PHILADELPHIA & READING.—Bids were received at the office of W. Hunter, Ch. Engr., 520 Reading Terminal, Philadelphia, Pa., on June 15, for Contract No. 9, masonry, trestle and embankment from the bridge at 17th and Indiana Sts. to the south side of Tioga St.; Contract No. 10, masonry, trestle and embankment from the south side of Tioga St. to the bridge over the Richmond Branch, P. & R. Ry.; Contract No. 11, bridges ready for ballast from 17th and Indiana Sts. to the bridge over the Richmond Branch, P. & R. Ry. Contracts have been let as follows: Contract No. 9, ARMSTRONG & LATTA, Land Title Bldg., Philadelphia, Pa., at $157,413; Contract No. 10, ENOS L. SEEDS, 6314 Wissahickon Ave., Philadelphia, $98,916; Contract No. 11, AMERICAN BRIDGE CO., Pennsylvania Bldg., Philadelphia, Pa., at $266,467.

SAN DIEGO, EL PASO & ST. LOUIS.—We are officially advised that P. A. McCarthy, Ch. Engr., El Paso, Tex., is preparing an approximate estimate of cost of 180 miles of standard-gage railway, preliminary to construction, and wishes to receive approximate preliminary quotations of cost of earth, loose and solid rock, tunnels through loose and solid rock, concrete culverts and bridges, ties, rails, fastenings, signs and stock guards, telegraph and telephone poles, wire, brackets and insulators, frogs, switches, switch equipment and track tools, trestle timber and iron work, and all materials usually entering into railway construction. All reliable parties submitting preliminary figures will be given an opportunity to submit final figures before letting contracts, and all figures submitted will be treated strictly confidential. Address Mr. McCarthy.

TONOPAH & TIDEWATER.—A 13-mile branch line will be built from Tecopa, Cal., to the Tecopa lead mines in Inyo County, Cal. John Ryan is Gen. Mgr. Ludlaw, Cal. DeWitt Van Buskirk is Second Vice-Pres., 100 William St., New York.

C. M. Rasor, Ch. Engr., Los Angeles, has completed survey for the Goldfield-Ely extension.

ELECTRIC RAILWAYS.

EAST LIVERMORE, ME.—We are officially advised that the Androscoggin Valley R. R. Co. plans to build about three miles of line this fall. As noted on March 11, this company was incorporated to build an electric railway in Maine, connecting East Livermore, Livermore and Turner. It will be 17 miles long. Right-of-way has been secured for two miles and surveys made for this distance. John A. Jones, Lewiston, Me., is Ch. Engr.

CLINTON, MASS.—D. N. McLean has been appointed chairman of a committee appointed by the Business Men's League to secure the construction of an electric railway from Clinton to Jackson, Miss.

NEW YORK, N. Y.—We are officially advised that bids were received on July 2 by the New York, Westchester & Boston Ry. Co. from the following contractors for graduation and masonry on the New York, Westchester & Boston Railway: (1) between 174th St. and the northern boundary of the City of New York and also (2) from the northern boundary of New York City, through Mount Vernon to North Pelham: Bellew & Merritt Co., Tuckahoe, N. Y., (2); J. C. Rodgers, 121 West 125th St., New York, (1) and (2); Lathrop & Shea, New Haven, Conn., (2); John R. Lee Co., Paterson, N. J., (1); John O'Brien Contracting Co., Waterbury, Conn., (1) and (2); J. H. Flick Construction Co., Mount Vernon, N. Y., (1) and (2); Wilson & English, New Rochelle, N. Y., (2); MacArthur Bros., 11 Pine St., New York, (1) and (2); Holbrook, Cabot & Rollins, Boston, (1) and (2); Gore, Meenan & Co., 149 Broadway, New York, (1) and (2); Scott, Smith, White Contracting Co., Memphis, Tenn., (1) and (2); Elmore & Hamilton Contracting Co., Albany, N. Y., (1); W. H. Crawford & Co., 42 Broadway, New York, (1); The Ferguson Contracting Co., 37 Wall St., New York, (1) and (2); United Engineering & Contracting Co., 17 West 42d St., New York, (1) and (2); The Seaboard Construction Co., Philadelphia, Pa., (2). G. L. Crider is Ch. Engr.

It is announced, unofficially, that contract for Section 1 was awarded to the O'BRIEN CONTRACTING CO., and for Section 2 to LATHROP & SHEA. See list of bidders above.

The New York, Westchester & Boston Ry. will be 32 miles long, running from the Harlem River at the foot of Lincoln Ave., through The Bronx to the northern line of the city of New York, thence through the cities, towns, and villages of Mount Vernon, Pelham, New Rochelle, Larchmont, Mamaroneck, Rye, and Port Chester, with a terminus at Port Chester; also a branch beginning at Mount Vernon and running through Westchester, Scarsdale, White Plains, Greenburgh and Elmsford, branch ending at that point; also a branch on the main line at or near 177th St. in the city of New York,

through that part of the Borough of The Bronx known as Clason Point and Throggs Neck, to Fort Schuyler on Long Island. It is to be maintained and operated as an electric railroad upon private right-of-way, with no grade crossings.

NEW YORK, N. Y.—The Appellate Division of the Supreme Court has decided that the Public Service Commission had overstepped its powers in refusing to give its approval to the franchise granted by the Board of Estimate and Apportionment to the South Shore Traction Co., because the commission believed the terms were not best for the general public, as noted fully on June 17. The case probably will be carried to the Court of Appeals.

NEW CITY, N. Y.—Announcement is made that the proposed Rockland R. R. will extend from Tenafly, N. J., northerly through Creskill, Demarest, Closter, Norwood and Northvale to Tappan, N. Y., thence through Sparkill, Piermont, Grand View, South Nyack, Nyack, New City, Congers, Haverstraw and West Haverstraw to Stony Point, about 34 miles with a branch from Nyack westerly via Nanuet and Spring Valley to Suffern 14 miles. The estimated cost of the line is $2,500,000. Surveys have been made for a line east of the Sparkill-Tenafly section from Sparkill, N. Y., south to Fort Lee, N. J., the construction of which will be taken up at a later date. The New York Public Service Commission, Second District, has granted permission to the company to build in Rockland County, and similar action has been taken by the Board of Supervisors of Rockland County. B. A. Hegeman, Jr., is Pres.; W. O. Jacquette, Vice-Pres.; A. C. Miller, Second Vice-Pres.; and Gen. Mgr.; S. S. Delano, Treas.; C. J. Hardy, Secy and Counsel. W. H. Coverdale is Ch. Engr., 66 Broadway, New York. Noted on June 17.

CARLISLE, PA.—The Cumberland Ry. Co. has awarded contract to the CARLISLE CONSTRUCTION CO., Carlisle, for the construction of a 24-mile electric line from Carlisle to Shippensburg by way of Newville. M. P. Moore is Ch. Engr., and John Graham, Newville, Pa., is Pres. W. F. Bascoe, Carlisle, is Vice-Pres., and Gen. Mgr. Noted on July 8.

LYNCHBURG, VA.—We are officially advised that the Peoples Improvement Co. will let construction contracts during July or August for an extension one mile long to Fairview Heights. R. J. Hughes, P. O. Box 81, Lynchburg, is Pres. (This item was erroneously noted last week under "Lynchburg, Pa.")

CHATTANOOGA, TENN.—The County Court has granted a franchise to Bowdre Brown and associates for building an electric railway in Chattanooga, including a line through St. Elmo, another line through Alton Park and Mountain Junction, connecting with the proposed Mountain Railway incline starting at St. Elmo. Two other lines are also proposed, one via Jackson Park and East Lake to Rossville, and another to Sherman Heights. It is estimated that $1,000,000 will be spent. Noted last week.

PROVIDENCE, KY.—The Kentucky Electric Railway Co., recently chartered, has elected the following officers: J. T. Edwards, Pres., Providence, Ky.; Ben Sisk, Silent Run, Ky., Vice-Pres.; B. H. Roney, Treas.; W. G. Roney, Secy. Capital, $10,000, which may be increased to $300,000. Line proposed is from Dawson Springs, Ky., to Providence, 20 miles, or to Madisonville, 25 miles. Survey has been made and right-of-way partly secured. Noted on July 1.

EAST LIVERPOOL, OHIO.—The Pittsburg & East Liverpool Elec. Ry. Co. has surveys under way for its proposed line to be built from East Liverpool to Pittsburg. J. M. Reed, Pittsburg, is Pres.

VINCENNES, IND.—The Vincennes Western Electric R. R. Co. has been incorporated to build an electric railway 14 miles in length, to connect Vincennes and Bridgeport Ill. Contract has been let to WM. L. SONTAG, Evansville, Ind., it is stated, for financing and constructing the proposed railway which includes a bridge across the Wabash river. The company also proposes to furnish power for lighting. Robert V. Stinson, Vincennes, is Pres.; J. D. Lacroix, Vincennes, is Secy.

TERRE HAUTE, IND.—The Terre Haute, Indianapolis & Eastern Traction Co., has completed surveys for the extension from Danville, Ind., to Aino and Sullivan. H. E. Smith, is Ch. Engr., 663 Wabash Ave., Terre Haute.

The Terre Haute, Merom & Southwestern Traction Co., will build an electric line to connect Terre Haute and Merom and other towns in Vigo and Sullivan Counties. D. M. Roberts, W. S. Roney, J. F. Enusch and others are the incorporators.

INDIANAPOLIS, IND.—The Indianapolis, Cloverdale & Vincennes Traction Co., has awarded contract to J. J. BURNS & CO., Chicago, for the construction of its proposed railway from Indianapolis to Vincennes by way of Mooresville, Eminence, Cloverdale, Worthington and Linton. Estimated cost, $18,000 a mile. E. M. Bowman is Pres.

SPRINGFIELD, ILL.—W. J. Gates, Vice-Pres., and Gen. Mgr of the Springfield, Beardstown & Quincy Ry Co., at Springfield, advises us that this company has all details completed for the construction of its line to Beardstown, a distance of 57 miles, and will build this section at once. Mr. Gates will be in charge of the letting of contracts and expects to receive proposals for same within the next 30 days, and desires to receive information from contractors, etc. This company was recently chartered to construct an electric railway from Springfield to Quincy via Beardstown. Capital stock, $25,000. Noted last week.

DES MOINES, IOWA.—The Des Moines, Winterset & Creston Electric Ry. Co., has awarded to the ENGINEERING CONSTRUCTION & SECURITIES CO., 171 La Salle St., Chicago, Ill., the contract for the engineering and construction of an interurban railway from Creston to Des Moines, extending through Macksburg and Winterset.

ABERDEEN, S. DAK.—A. L. Ward, of Aberdeen, has been granted a franchise to build a street railway in Aberdeen. Application has also been made for a charter.

HANNIBAL, MO.—We are officially advised that the Mexico, Perry & Santa Fe R. R. Co., has completed surveys and has secured right-of-way for a proposed interurban line from Hannibal, Mo., to Columbia, passing through the towns of Oakwood, New London, Center, Perry, Santa Fe, Molino, Mexico and Hereford. At Hereford the line divides, the western line going to Columbia and the eastern branch going to Fulton. Total length, 103¼ miles. Preparations are being made to extend the line to Jefferson City, the state capital. Franchises have also been obtained in all the towns and cities along the route. Headquarters are at Mexico, Mo. Matthias Crum Co., Pres.; C. C. Heizer, Vice-Pres.; W. W. Botts, Treas.; Richard H. Phillips, Consulting Engr., Security Bldg., St. Louis, Mo.

TULSA, OKLA.—The West Tulsa Belt Ry. Co. has been chartered to build a belt line five miles long. Estimated to cost, $20,000. The directors are W. E. Hawley, C. L. Hounker, Jr., Hettie C. Hall, John A Haver and Gray Erick, all of Tulsa.

SEATTLE, WASH.—D. C. Conover and E. P. Moran have been granted a franchise to construct an electric railway from Bellevue to Lake Sammamish.

GARDNERVILLE, NEV.—The Board of County Commissioners has granted to H. H. Springmeyer and A. Jensen a franchise to build a street railway from the terminus of the Carson Valley branch of the Virginia & Truckee Ry. to Gardnerville, a distance of one mile.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

LEWISTON, ME.—Surveys are being made by Walter Sawyer, of the Union Water Power Co., for dams for storage and water-power development.

OLDTOWN, ME.—Work is soon to be commenced on an electric power house at this city, it is stated, which is to be used in connection with the plant of the Penobscot Chemical Fibre Co., at Great Works.

HOLYOKE, MASS.—The Board of Public Works of Holyoke probably will expend about $50,000 to enlarge the water works and electric light plants and extend the electric wires, gas mains and water mains to Smith's Ferry and Kenilworth. W. K. Snow is Mgr. municipal power plant.

NEW HAVEN, CONN.—The United Illuminating Co. expects to increase the size of its present power plant, for which purpose a large tract of land adjoining its present station has been purchased. E. K. Parker is Supt.

BUFFALO, N. Y.—We are officially advised that bids were received July 6 by Francis G. Ward, Comr. Pub. Wks., for a steam turbine generator capable of delivering 100 KW. at 125 volts. The contract has been let to FERRAR & TREFT, of Buffalo.

FULTON, N. Y.—The contract for construction of the power-house of the Fulton Light, Heat & Power Co. on North First and Van Buren Sts., has been awarded to JOHN HENRICK, of Oswego, and JOSEPH CONNERS, of Fulton.

ALIQUIPPA, PA.—An addition to the Aliquippa plant of the Jones & Laughlin Steel Co., Ross St., Pittsburg, Pa., is to be built this summer. It will consist of a power plant. The proposed plant will be used exclusively for the driving of the tin plate plant now building and which will have an equipment of 30 tin mills.

WILMINGTON, DEL.—Clarence H. Geist, Land Title Bldg., Philadelphia, Pa., has acquired possession of the Wilmington Gas & Electric Co. He has been elected president; Edmund Mitchell, of this city, Vice-Pres., and William P. Taylor, Secy. and Treas. The other directors are George S. Capelle, of this city, and C. W. Fox, J. A. Slattery, W. C. Cole, H. U. Rihle, C. H. Weak, all of Philadelphia. It is intended to expend $750,000 in making improvements to the plant. A 1,000,000-cu. ft. gas tank will be built, 15 miles of new mains will be laid and new machinery and pipes will be installed. The company will retain its offices at 827 Market St. The building will be enlarged and improved.

RURAL RETREAT, VA.—The Cornett Light & Power Co., of Rural Retreat, has been incorporated by S. M. Cornett, Jr., and Eva Brown, to establish a Rural Retreat power plant and electric light system. Capital, $5,000.

GREAT CACAPON, W. VA.—The Hydro-Electric Developing Co. has been chartered to harness the power of the Great Cacapon River in the eastern section of West Virginia. It is proposed to develop the water power of the rivers and streams of the state, especially the Great Cacapon River. The capital stock is $100,000. Incorporators are: William B. Osler and Morris A. Orndorff, of Great Cacapon; Samuel R. Boyer, of Hanover, Pa.; Albert Holland, of Baltimore, and William F. Disher, of Berkeley Springs, W. Va.

ATLANTA, GA.—The Committee on Electric and other Railways of the City Council reported favorably regarding a franchise for 50 years to be granted to the Central Georgia Power Co. to erect poles and lay conduits and use all other grants necessary to furnish in Atlanta electric power, heat and light.

ELLIJAY, GA.—Press reports state that W. M. Scott, of Atlanta, Ga., and Dr. Watkins, of Ellijay, are planning the construction of a hydro-electric plant for the transmission of electricity to Rome, Ellijay and other cities.

FORT PIERCE, FLA.—Bids will be received about Oct. 1 for the construction of an electric light and power plant for the St. Lucie Ice Co. Cost, $8,000. R. W. Whythe is Pres.

ELIZABETHTOWN, TENN. — The Doe River Lighting & Power Co. intends to develop a 2,000-HP. water power plant and to install water wheels to develop 1,200 HP., as well as other electrical machinery.

SPRINGFIELD, OHIO.—A contract has been let by the Springfield Light, Heat & Power Co. to the AMERICAN DISTRICT STEAM CO., of Lockport, N. Y., for the necessary 18-in. pipe for the construction of a main from the intersection of Main St. and Fountain Ave., North, to Columbia St., thence west to Fisher St. and north in the alley to the site of the new plant. The construction of this main will provide for 40% more steam load. The main will take the old pipe at Main St. It will cost about $30,000 to make this improvement.

CLERMONT, IND.—Specifications for repairs and installation of pump at power house of the Indian School for Girls will not be ready before Aug. 1. Charlotte Dye is Supt.

OSGOOD, IND.—F. R. Phillips, Supt. of the municipal electric light plant, is planning to establish an all-night service, and is also contemplating the installation of additional turbines.

HARTFORD CITY, IND.—The directors of the Hartford City Lighting Co. have decided to erect a central power station in this city, and to transmit electricity for light, heat and power to Union City, Dunkirk, Gas City, Upland, Eaton, Redkey and Ridgeville. It is estimated that the power plant will cost $75,000, exclusive of the equipment. W. H. Yule is Supt.

INDIANAPOLIS, IND.—The Merchants' Heat & Light Co. has let a contract to J. G. WHITE & CO., 49 Exchange Pl., New York, for constructing a central station. The building will be of brick and steel construction.

IRONWOOD, MICH.—We are officially advised that Henry I. Lea, Consult. Gas Engr., The Rookery, Chicago, Ill., has been retained by the Fyfe-Wallace interests and is preparing plans and specifications for the proposed gas works and distribution systems to be installed this summer at Ironwood. Bids covering apparatus and street mains will be received by Mr. Lea at his office, Chicago.

BAYFIELD, WIS.—There is under consideration the installation of new boilers, series tungsten and magnetic arcs, for street lighting and a new switchboard for the municipal lighting system. It is proposed to change from single-phase, 33 cycles, 1,100-volt to 3-phase, 2,300-volt, 60 cycles. F. M. Herrick, Jr., is Mgr.

MINNEOTA, MINN.—Plans for the construction of a local electric light plant are under consideration by the citizens of Minneota, it is stated.

LITTLE ROCK, ARK.—The Ouachita Power Co. is incorporated to construct a dam 62 to 80 ft. long across Ouachita River in Garland County and generate power and supply electricity in Hot Springs, Little Rock and surrounding territory. Capital $50,000. Incorporators: Levi Storthz, Joe Storthz, D. L. Phillips and others.

MURFREESBORO, ARK.—D. W. Jones, of Little Rock, is reported interested in the construction of a dam on Little Missouri River, near Murfreesboro, for the purpose of developing power.

ARDMORE, OKLA.—W. T. Forsythe, Engr., of West Chester, Pa., it is reported is preparing plans for the proposed power plant to be constructed on Washita River in connection with construction of railway and which will cost about $5,000,000. Oscar Ayres is interested.

MUSKOGEE, OKLA.—The contract for laying a 4-in. gas main from the city to the river station, a distance of 4½ miles, has been awarded to I. O. STEWARD at 85 cts. per ft. This includes hauling, digging trench and laying the pipe. L. B. Kinsey is City Engr.

HYDRO, OKLA.—An election is to be held here soon to vote on the proposition of a bond issue of $25,000 for water-works and electric lights.

DENVER, COLO.—Frank W. Frueauff, Vice-Pres. of the Denver Gas & Electric Co., has announced that the company will replace the generating plant which was injured by the recent explosion.

NORTH YAKIMA, WASH.—The Central Heating Co. has been granted a franchise to build and operate a plant here.

EUGENE, ORE.—It is reported that the Portland, Eugene & Eastern Ry. Co. is contemplating the construction of a power plant this year at Martin's Rapids, about 30 miles east of Eugene, which will furnish power for all its railways as far north as Albany.

McMINNVILLE, ORE.—This town has voted a bond issue of $30,000 for the completion of the electric lighting and power plant on Baker Creek.

BAKER CITY, ORE.—George W. Sturtevant announces that his associates probably will build a power plant to cost $600,000 on the Eagle River, near Baker City.

SANTA ANA, CAL.—The Edison Electric Co., of Los Angeles, has secured an electric lighting franchise in Santa Ana. H. B. Williams is County Clerk.

COALINGA, CAL.—According to press reports announcement is made by the San Joaquin Light & Power Co., that it will extend its electric line from Lemoore to the city of Coalinga and the oil fields of the district. Water also will be supplied to the district. The project in contemplation will cost between $500,000 and $750,000. The offices will be located in Coalinga.

NEVADA CITY, CAL.—C. Curtis, Engr. for the Southern Pacific Co., has made application to the Supervisor Bigelow of the National Forest for a permit to construct a power plant on the North Yuba River in Sierra County. Mr. Curtis stated that the company will expend $4,000,000 in the construction of the plant and that orders for electrical appliances amountin[illegible] $13,000,000 had already been placed [illegible] eastern firms. The plant, he stated, [illegible] be completed before the Auburn Tru[illegible] cut-off is finished and the whole system [illegible] be electricized.

PHOENIX, ARIZ.—John W[illegible]arpe has made application to the City [illegible]il for a franchise to construct and o[illegible] a gas and electric light plant.

HAWTHORNE, NEV.—An [illegible] power plant, costing about $25,000, is [illegible]mplated for the purpose of supplying po[illegible] and light for the camp of Lucky Boy, [illegible] and the towns of Hawthorne, Aurora, [illegible] Masonic. Hon. T. L. Oddie, of Goldfield, [illegible] is interested in the enterprise, also [illegible] Miller, J. E. Adams and Edward Hal[illegible] of Lucky Boy.

POST FALLS, IDAHO.—The [illegible]shington Water Power Co. has purch[illegible] all the property of the Cable Milling [illegible] in this town, consisting of a flouring [illegible], water power, etc. The purchaser will [illegible]arge the plant and run the mill with electricity instead of water power.

ELK CITY, IDAHO.—It is reported that the Idaho Buster Mining Co. and the Golden Crown Mining Co., which are closely connected, are to erect an electric power plant near Elk City.

TORONTO, ONT.—Bids are asked by Hon. Adam Beck, Chn. Hydro-Electric Power Comn., continental Life Bldg., Toronto, Ont., until 5 p. m., July 28, for the construction of transformer and interswitching station buildings at Toronto, London, Guelph, Preston, Berlin, Stratford, St. Marys, Woodstock, Paris and St. Thomas, all in Ontario.

ST. THOMAS, ONT.—It is stated that D. W. Yates, Hydro-Electric Engr., has presented a report to the City Council, showing estimates, etc., for the proposed plant for the distribution of electric power from Niagara Falls. For an entire plant the cost will be $83,620, while remodelling the old plant will cost $82,810.

VICTORIA, B. C.—The British Columbia Electric Co. has awarded to MALCOLM & DINSDALE the contract for an addition to its plant on Store St. Cost of work, $50,000.

FERNIE, B. C.—The city is about to purchase a site on which to erect a new power plant. W. W. Tuttle is Mayor.

MEXICO CITY, MEX.—According to the "Mexican Herald," a canal that will carry the waters of the Santiago River a distance of 26 kilometers and drop them 1,800 ft., thereby making it possible to develop at least 90,000 HP., is planned by the Pimental Cuesta interests. It is stated that the canal will be built by the Chapala Power & Irrigation Co., now being organized. This is the concern that will combine the Pimental street railway and electric light and power systems and the valuable water power, irrigation, and transmission concessions of Manuel Cuesta. The proposed canal would extend from the Juanaca Falls of the Santiago River to Las Juntas, where one of the Pimental power plant is now located. At Juanacatian the Santiago River enters a barranca, and between that point and Las Juntas drops more than 1,800 ft. The canal would follow one side of the baranca until Las Juntas was reached, when the waters of the river would be discharged on turbines far below. The estimated cost of the canal is $60,000 a kilometer. The power development plans now being formulated in connection with the organization of the new company include the transmission of current to Aguascalientes, Zacatecas, and other cities and towns, and to a number of mining districts.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

*BANGOR, ME.—Bids are asked by the Mayor and Street Engineers until noon, Aug. 2, for the necessary repairs and reinforcement of the foundations of the bridge across the Penobscot River, between the cities of Bangor and Brewer, Maine.

RUMFORD, ME.—Bids will be received by the Board of Selectmen until Aug. 17 for furnishing material and constructing a bridge over Androscoggin River, in Rumford. It will be about 600 ft. long and require approximately 700 cu. yds. masonry. E. E. Greenwood, of Showhegan, Me., is Engr.

HAVERHILL, MASS.—New bids were received by the Essex County Commissioners on July 12 for the construction of the southerly approach of the new Haverhill bridge. The bids and bidders were: CASHMAN BROS. CO., Newburyport, Mass., (awarded contract), to be completed Oct. 30, $28,157; Mansella & Rossi, Woburn, to be completed Nov. 30, $31,473; A. G. Tomasella, Dorchester, to be completed Dec. 15, $32,043; Cenadella & Co., Milford, to be completed Jan. 1, $32,805. Bids received for this work on June 28 were given in issue of July 8.

MAPLEVILLE, R. I.—Bids were received on July 9 by Town Council of Burrillville, at Harrisville, for constructing a reinforced-concrete girder bridge with retaining walls, approaches and parapet walls over the Chepachet River at Mapleville. Seagrave & Lincoln are Engrs., Commercial Bldg., Woonsocket, R. I. Contract was awarded to the GLOBE COAL CO., Woonsocket, at $2,302.

HARTFORD, CONN.—The contract for a new stone bridge over the Park River at Mulberry St. has been awarded to the O'CONNOR-WALKER CUT STONE CO., of Hartford, after plans of Davis & Brooks, Archs.

SLINGERLANDS, N. Y.—The OWEGO BRIDGE CO., of Owego, N. Y., has been awarded the contract for constructing a concrete bridge over the Normanskill Creek near Slingerlands, by the Town of Bethlehem, Albany County. The contract price is $11,000.

YONKERS, N. Y.—Bids will be received by the Board of Contract and Supply until 8 p. m., July 26, for construction of a concrete arch bridge over the Nepperhan River at Center St. S. L. Cooper, City Engr.

NEW YORK, N. Y.—The Board of Estimate and Apportionment has adopted resolutions providing for appropriations as follows: $50,000 for construction of foot walk approaches to the New York and Putnam Bridge over Harlem River; $15,000 for reconstruction of highway bridge over Garretsons Creek at Ave. U, Boro. of Brooklyn; and $40,000 for construction of a bridge over Bronx River at 180th St., Bronx Boro.

CARLISLE, PA.—C. A. Bingham, of Carlisle, has been selected by the County Commissioners to prepare plans for a 142-ft. reinforced-concrete bridge.

READING, PA.—WILLAUER & CO., of Pottstown, have secured the contract for erecting a reinforced-concrete arch bridge in Colebrookdale Township, Berks County, over Ironstone Creek near Gabelsville. Bids were received on July 1.

HARRISBURG, PA.—Bids are asked until noon, July 30, by W. W. Caldwell, Comr. Highways, for constructing a steel-girder bridge, and concrete abutments on the line of 17th St., over the Philadelphia & Reading Ry. Estimated cost, $20,000.

BALTIMORE, MD.—O. F. Lackey, Harbor Engr., has prepared plans and recommends building of wider bridge over Jones Falls at Pratt St., it is announced. Estimated cost, $90,000. Proposed structure is to be 120 ft. wide, single span of concrete, with coping of same material. Mr. Lackey also suggests widening of Pratt St. to President St. The combined improvements would cost $250,000.

*WASHINGTON, D. C.—Bids are asked until noon, July 31, by the District Commissioners for removing the old Anacostia bridge across the Anacostia River at foot of Eleventh St., S. E., Washington.

WOODFORD, VA.—Bids are asked by Geo. P. Lyon, of Woodford, County Supervisor, until Aug. 1, for erecting a steel or concrete bridge (Downing's Bridge) near Woodford. Plans and specifications at office of State Highway Commission, Richmond.

BARBOURSVILLE, W. VA.—The BRACKETT BRIDGE CO., Cincinnati, Ohio, has been awarded contract for building a bridge over the Guandotte River, at $12,395. Bids were received on July 8 and rejected as excessive. Details were given last week.

QUINCY, FLA.—Bids are asked until Aug. 2 by T. R. Canty, Clerk, Board Gadsen County Commissioners, for erection of steel bridge.

MERIDIAN, MISS.—Bids are asked until 2 p. m., Aug. 2, by W. R. Pistole, Chancery Clerk, for construction of a wooden bridge across Baker Creek.

HARRISONBURG, LA.—The Police Jury has awarded contract to MIDLAND BRIDGE CO., Kansas City, Mo., to construct steel bridge over Bayou Bushley to cost $16,000.

BUTLER, TENN. — The CONVERSE BRIDGE CO., Chattanooga, Tenn., has been awarded contract for the construction of a steel bridge across the Watauga River at Butler, Tenn., to be owned jointly by the counties of Carter and Johnson. It will be 340 ft. in length. The contract price is $8,000.

PRESTONSBURG, KY.—Floyd County Commissioners have awarded contract to OWEGO BRIDGE CO., Owego, N. Y., at $10,300, to construct three bridges.

SPRINGFIELD, OHIO.—Bids will be received until Aug. 9 by the Board of County Commissioners for rebuilding a county bridge known as the Moores Lime Co. Bridge No. 1008, Springfield Township.

TROY, OHIO.—Bids will be received by H. F. Pearson, Audr., Miami County, until 10 a. m., July 24, for repairing west span of the Prairie Ford bridge, over the Stillwater River, in Union Township, by placing steel joists, risers, etc., and laying an oak or creosote floor or by a permanent floor system.

*DANVILLE, ILL.—Bids were received on July 14 by S. K. Van Fleet, of Indianola, Ill., Clk. Bd Comrs., for the construction of a steel bridge over the Little Vermilion River, of a span of 80 ft. (c. to c. of pins), with concrete abutments; also the construction of 2,530 cu. yds. of approach grade and 40 ft. of c.-i. pipe 41 ins. in diameter. Fisher & McCann, Engrs., Room 310, Garrett Bldg., 9 West Harrison St., Danville. Contract has been awarded to the DECATUR BRIDGE CO., Decatur, Ill., for bridge and abutments at $3,030; for earth fill, to ED. MILLER, of Indianola, Ill., at $430.

*CHICAGO, ILL.—Bids were received by the Board of Trustees of the Sanitary District of Chicago on July 14 for furnishing metal work for the superstructure of highway bridges across the North Shore Channel. Lowest bidder was the FORT PITT BRIDGE WORKS, Pittsburg, Pa., at $20,-596.

DURANT, OKLA.—City has voted a $10,-000 bond issue for bridge construction.

WINTHROP, WASH.—Bids will be received until 2 p. m., July 26, by the State Highway Board at Olympia, Wash., for constructing a 125-ft. span steel bridge across Methow River at town of Winthrop. Bowerman & McCloy, Engrs., 649 New York Bldg., Seattle.

KALAMA, WASH.—Cowlitz County will construct a 150-ft. span steel bridge over the Kalama River in Township 6 North.

YREKA, CAL.—Contracts have been awarded by the Board of Supervisors as follows: To B. G. FOLEY CO., Seattle, Wash., for Shasta River bridge, at $8,192, and Scott River bridge, at $4,192.

*PHOENIX, ARIZ.—Bids are asked by the Board of Supervisors, Maricopa County, until Aug. 16, for a reinforced-concrete bridge over the Salt River at Phoenix, Ariz. L. G. Knipe and B. L. Davis, Engrs. Estimated cost, $100,000.

TORONTO, ONT.—Bids are asked by the Board of Control until noon, Aug. 3, for the construction of a bridge on the extension of Harbord St., crossing over Beatrice St., consisting of the following work: One reinforced-concrete arch of 35-ft. span, having a 42-ft. roadway, and two 6-ft. sidewalks, containing about 1,500 cu. yds. of concrete.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

BANGOR, ME.—The contract for the general work of construction of the proposed wing at the Eastern Maine Insane Hospital at Bangor has been awarded to F. W. CUNNINGHAM, of Portland, Me., it is stated, the lowest bidder. Work will begin at once and the wing will be closed in by Jan. 1.

BOSTON, MASS.—The Houghton & Dutton Co. will erect a 9-story addition to its department store, Beacon St., between the firm's building on the corner of Beacon and Tremont Sts., and the one on the corner of Beacon and Somerset Sts. The contract has been let to GEORGE W. HARVEY CO., 24 Milk St., Boston. Clinton J. Warren, 7 Water St., Boston, is Arch.

ESSEX, CONN.—Bids will be received by F. B. Braden, Chn., until noon, July 29, for the construction of a school building.

HAMBURG, N. Y.—Plans are being drawn by Thomas W. Harris, Arch., 1 Erie County Bank Bldg., Buffalo, for a 2-story and basement school building, 50 × 90 ft., of brick and terra cotta, to cost $50,000. Albert Strathmaier is Clerk Bd. of Education.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Aug. 14, by R. C. Hollyday, Ch. of Bureau of Yards and Docks, for alterations to the U. S. Naval Hospital, Brooklyn, N. Y. Specifications are on file at the office of Engineering News, New York.

Schwartz & Gross, 347 Fifth Ave., are completing plans for an apartment house for Paterno Bros., to be erected on Riverside Drive, 104 ft. north of 116th St., 60 × 120 ft., and estimated to cost $300,000.

The City Farm Colony Buildings, consisting of a female dormitory, three stories, 45 × 61 ft.; male dormitory, three stories, 46 × 190 ft., and an insane pavilion, one story, 70 × 34 ft., to be established by the city on Staten Island, will be constructed by LUKE A. BURKE & SONS CO., 25-27 West 42d St., from plans by Raymond F. Almirall, 51 Chambers St. It is estimated that the group will cost about $125,000. Robert H. Hebberd is Comr. of Public Charities, foot East 26th St.

Plans have been prepared by J. C. Cocker, 2017 Fifth Ave., for a 5-story flat, 75 × 82.10 ft., for John Glass, Jr., 335 West 14th St., to be erected in the south side of 178th St., 100 ft. east of St. Nicholas Ave., to cost $150,000.

C. B. Meyers, 1 Union Sq., has completed plans for a 6-story apartment house, 100 × 75 × 85.8 ft., for J. Fishman, 25 West 90th St., to be erected in the north side of 93d St., 425 ft. west of Riverside Drive. Estimated cost, $225,000.

NEW YORK, N. Y.—Bids are asked until 10 a. m., July 29, by William F. Baker, Police Comr., for furnishing all the labor and furnishing and erecting all the materials necessary to build and complete the station house, prison and garage for the 13th Precinct on the ground and premises in the City of New York, on the easterly side of Clinton St., 119 ft. 5 ins. north of northeast corner of Broome and Clinton Sts., Boro. of Manhattan.

The Tomahawk Realty Co., 103 Park Ave., will erect a 6-story flat, 99.11 × 90 ft., at the southwest corner of Convent Ave. and 149th St., from plans by Gross & Kleinberger, Arch., Bible House. Cost, $150,000.

Trowbridge & Livingston, Archs., 527 Fifth Ave., have been commissioned to prepare preliminary plans for a 5-story fireproof brick and limestone residence, 26 × 100 ft., for J. B. Trevor, of 49 Wall St., to be erected at 9 East 91st St., at a cost of about $100,000.

H. H. Wilkinson, Arch., 114 East 28th St., has completed plans for the elevator apartment house, 100.5 × 139.8 ft., which the Harperley Hall Co., 114 East 28th St., is to erect at the northwest corner of Central Park West and 64th St., to cost about $500,000.

The Ira Realty Co., 1320 Madison Ave., will erect in the south side of 119th St., 150 ft. east of Amsterdam Ave., a 6-story flat building, 125 × 87.11 ft., costing $125,000. Sommerfeld & Steckler, 19 Union St., Archs.

Harry T. Howell, Arch., Third Ave. and 149th St., has plans for a 5-story apartment house to be erected in the south side of 137th St., 155.1 ft. east of St. Ann's Ave., for Frederick Vollmar, of 580 East 137th St. Estimated cost, $50,000.

NEW YORK, N. Y.—Bids were received as follows by the Armory Board on July 16, for all work and materials required in the construction and completion of a new Armory building for the 22d Regiment Engineers, N. G., N. Y., at Fort Washington Ave., 168th and 169th Sts., Boro. of Manhattan: Guidone & Gelardi, 1 Madison Ave., New York, $515,000; Columbia Engineering Co., Produce Exchange Annex, $622,000; Snare & Triest Co., 143 Liberty St., New York, $516,850; Joseph De Benedite, $561,-234; Thomas B. Leahy Bldg. Co., 1 East 42d St., New York, $532,323; J. H. Parker Co., 155 Greenwich Ave., New York, $559,000; Thomas McKeoan, 103 Park Ave., New York; $539,000; P. J. Brunnan, $550,000; Kelly & Kelley, 15 East 42d St., New York, $571,290; J. F. Walsh, $555,000; Cramp & Co., $560,900; J. T. Brady, 445 Seventh Ave., New York, $629,000; I. A. Hopper, 231 West 125th St., New York, $589,146; George Hildebrand, 38 Park Row, New York, $567,-800; Fountain & Choate, 110 East 23d St., New York, $563,918; T. J. O'Connell, $563,-000; Luke A. Burke & Son, $560,000; George F. Driscoll, $549,000.

Plans have been completed by Charles B. Meyers, 1 Union Sq., for the 6-story loft building, 55 × 104 ft., brick, limestone and terra cotta, to be erected at 69-71 Wooster St., for Golde & Cohen, 171 Broadway. Estimated cost, $100,000. No sub-contracts have yet been awarded.

Goldner & Goldberg, Archs., Westchester and Jackson Aves., have plans in progress for two tenements and stores to be erected at the northwest corner of 169th St. and Fulton Ave., The Bronx. Max Cohen, 1185 Fulton Ave., is the owner. Estimated cost, $100,000.

Harry T. Howell, Third Ave. and 149th St., The Bronx, has prepared plans for one 6-story apartment house to be erected at the southwest corner of Freeman St. and Hoe Ave., for Samuel Lyttle, of 1224 Hoe Ave. The building will be 50 × 90 ft., with stores on first story. Cost, $60,000.

NEW YORK, N. Y.—Plans have been filed for a 12-story apartment house to be erected for the Riviera Realty Co., Mark Ash, Pres., on the block on the easterly side of Riverside Drive extension from 156th to 157th St., from designs by William L. Rouse, 11 East 43d St., and L. A. Goldstone, 110 West 34th St., Archs. It is to be of brick, with limestone trimmings. It will have a frontage of 199.11 ft. and a depth of 175 ft. It will contain 150 suites of apartments. The cost will be $1,700,000.

Plans are being prepared by A. D. Hinsdale, Arch., Garm's Hotel, Surf Ave., Coney Island, for a fireproof, reinforced-concrete hotel, 60 × 100 ft., including a large roof garden, to be erected at the southwest corner of Surf Ave. and West Eighth St., Coney Island, costing about $100,000. Conrad Stubenbord & Son, Surf Ave. and Eighth St., will erect the building and will be ready to receive estimates on all contracts about Aug. 25.

The Alexander Duff Operating Co., 115 Broadway, will soon erect on the north side of 164th St., 100 ft. east of Broadway, a 6-story apartment house, 126 × 100 ft. No plans have yet been prepared or architect selected. A. D. Duff, Geo. H. Conger and W. J. Leonard are Dirs.

Goldner & Goldberg, Archs., Westchester and Jackson Aves., are also preparing plans for two 5-story tenements and stores to be erected by Mrs. M. A. Mestaniz, 158th St. and Forest Ave., in the north side of 100th St., Jackson to Forest Aves., The Bronx. Cost, $120,000.

Plans have been filed by William L. Rouse, 11 East 43d St., and L. A. Goldstone, 110 West 34th St., Archs., for a 12-story apartment house, with 37 suites, to be built for the Allendale Building Co., Benjamin Merucai, Pres., at the northeast corner of West End Ave. and 99th St., at a cost of $700,000, and for a 10-story apartment house with 41 suites, to be erected for the Barkin Construction Co., at a cost of $600,000, at the northeast corner of Riverside Drive and 98th St.

NEW YORK, N. Y.—Bids are asked by Nicholas J. Hayes, Fire Comr., until 10:30 a. m., Aug. 2, for furnishing all the labor and materials required for alterations and repairs to quarters of Engine Company No. 47, located at 502 West 113th St.; for furnishing all the labor and materials required for repairs to quarters of Engine Company No. 42, located at 1192 Fulton Ave., Boro of The Bronx.

Bids are asked until 3 p. m., Aug. 2, by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education, for alterations, repairs, etc., at Public School No. 5 (Old Manual Training High School Annex), and Public Schools Nos. 58, 72 and 94, Boro of Brooklyn; for installing heating and ventilating apparatus in new Public School No. 164, on the easterly side of 14th Ave., between 42d and 43d Sts., Boro of Brooklyn; for installing heating and ventilating apparatus for additions to and alterations in Public School No. 30, on the southeast corner of 141st St. and Brook Ave., Boro of The Bronx; for the general construction, etc., of portable building at Public School No. 21, on the southerly side of Sherman Ave., between Sand St. and Morningstar road, Port Richmond, Boro of Richmond; for alterations, repairs, etc., at Public Schools Nos. 4, 11 and 55, Boro of Brooklyn.

NEW YORK, N. Y.—Clinton & Russell, Archs., 32 Nassau St., have filed plans for the Trinity Church Corporation for an 8-story loft building, to be erected upon a plot 151.3 ft. front and 65 ft. deep at the northeast corner of Hudson and Vestry Sts., replacing a row of eight 2 and 3-story tenement houses. The new building will be of brick and limestone, with a frontage of 151.3 ft. and similar in design to the loft buildings being erected for the church corporation further north in Hudson St. It is to cost $150,000.

William J. Dilthey, Union Sq., New York, has awarded to H. A. RUTAN, 297 Pulaski St., Brooklyn, the mason work, and J. M. FOX, 270 Herkimer St., Brooklyn, foundation work, for the proposed residence for Peter W. Rouse, 549 Broadway, New York, to be erected at the northwest corner of Prospect Park West and Garfield St., costing between $75,000 and $100,000. The building will be four stories high, 110 × 50 ft., of brick, limestone and granite, including a billiard room. The architect will award all other contracts.

The church to be erected at 13th Ave. and 57th St., Brooklyn, for the Roman Catholic Church of St. Frances De Chantel, Rev. Father John McAdam, Pastor, 1½-story brick and limestone, 65 × 180 ft., will be constructed by PETER CLEARY, of 115 Marion St., Brooklyn. Helmle & Huberty, 190 Montague St., are Archs. Estimated cost, $50,000.

Pickering & Walker, Archs., 5 East 42d St., for the No. 829 Park Avenue Co., M. K. Miller, Pres., have filed plans for a $800,000 12-story apartment house to be built at the southeast corner of Park Ave. and 76th St. It will have a frontage of 107 ft. and a depth of 100 ft., and will contain 48 suites of apartments.

Plans have been filed for the erection of nine 6-story flat houses to contain accommodations for 25 families and to be built for Charles M. Rosenthal, in West 158th St., near the New York Central Railroad tracks, at an estimated cost of $360,000.

W. B. Chambers, Arch., 35 Wall St., filed plans for 12-story apartments, to house 15 families, on the northeast corner of Park Ave. and 62d St., 85.1 × 64.3 ft. The house will be of brick, with trimmings of granite and limestone. It will cost $275,000. The owner is the No. 563 Park Avenue Co.

Plans have been filed for a 12-story apartment house, to be erected at 848 to 852 Seventh Ave., from designs by Albert & Joseph Bodker, 160 Fifth Ave., Archs., for the Rockford Realty Co., E. C. Potter, Pres. It is to be of brick, with limestone trimmings, with a frontage of 75 ft. and a depth of 81 ft. It will contain 24 suites of apartments. It is to cost $450,000.

MOUNT VERNON, N. Y.—We are officially advised that the general contract for the construction of Church of Our Lady of Mount Carmel, to be erected at Mount Vernon, N. Y., has been awarded to G. ZIBELLI & SON, 160 South Tenth Ave., Mount Vernon, N. Y. N. Serracino, Arch., 1170 Broadway, New York, prepared the plans and will supervise the construction.

NEWARK, N. J.—Feist & Feist, of Newark, will erect 29 2-family dwellings in the Roseville section, costing $150,000 altogether, and to be ready for occupancy by Oct. 1.

PATERSON, N. J.—HOGGSON BROS., 7 East 44th St., New York, have secured the contract to erect the proposed building for the Second National Bank at Paterson, to cost in the neighborhood of $100,000.

PITTSBURG, PA.—The P. W. FINN CONSTRUCTION CO., Grant Boulevard, has been awarded the contract for the $500,000 club house of the Pittsburg Athletic Association. The contract price approximately is $315,000, and this includes all except the steel contract, which originally was let to the BROWN-KETCHAM CO., of Indianapolis. The contract calls for completion in twelve months of the structure, which is to be built in the block bounded by Fifth Ave., Grant Boulevard and Lytton Aves.

Contracts are being let for the 12-story office building to be erected by Henry C. Frick in East Liberty. The CARNEGIE STEEL CO. will provide 1,700 tons of structural steel for the structure, delivery to be made when the shapes are needed. The ALLEGHENY COUNTY LIGHT CO. will furnish current for an equivalent of 1,000 25-watt Tungsten lamps for illuminating purposes, 100 HP. for driving a house service pump, vacuum cleaning service and three high-speed electric elevators.

PHILADELPHIA, PA.—A permit has been granted to the Drexel Apartments Co., which was recently granted a charter, for the erection of an apartment house at the northwest corner of 63d St. and Overbrook Ave. The building, designed by Horace Trumbauer, Arch., Land Title Bldg., will occupy an area of 177 × 60 ft., and will contain 24 seven-room suites. The cost will be $100,000.

F. C. MICHAELSEN & SONS, 59th and Chestnut Sts., has a contract to erect a $50,000 apartment house at 42d and Chestnut Sts. for Dr. Stout.

BALTIMORE, MD.—The preliminary plans for the theater which is to be erected on the site of the former Baltimore & Ohio Railroad central building, at Baltimore and Calvert Sts., are being prepared by Paul Emmart, Arch., Union Trust Bldg. It is said the work of construction will begin in a few weeks. The cost of the building is estimated at $100,000.

ANNAPOLIS, MD.—Baldwin & Pennington, Archs., Professional Bldg., Baltimore, Md., have been selected by the Board of Visitors and Governors of St. John's College, Annapolis, to prepare plans for rebuilding McDowell Hall, which was destroyed by fire last February. Designs were submitted in competition by several architects, and the ones of the above firm were decided upon. It is the intention to rebuild the structure along its ancient lines, the building having been begun in 1745. The estimated cost is placed at about $50,000.

NORFOLK, VA.—Bids are asked by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., Aug. 7, for improvements to Building No. 16 at the Navy Yard, Norfolk. Specifications are on file at the office of Engineering News, New York.

DALLAS, N. C.—We are advised that the County Commissioners of Gaston County have employed Milburn, Heister & Co., Archs., Home Life Bldg., Washington, D. C., to prepare plans and specifications for a jail and a court house building. Estimated cost, $60,000. Bids will be received some time in August.

FORT MORGAN, ALA.—Bids are asked until 1.30 p. m., Aug. 12, by Capt. H. B. Chamberlin, Constr. Q. M., for construction and plumbing two double sets of N. C. O. quarters at Fort Morgan, Ala.

GULFPORT, MISS.—Award has been recommended by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., to be made to GEORGE MOORE & SONS, of Nashville, Tenn., for the construction of a post-office building at Gulfport, Miss., at $98,989. Time to complete is set at Aug. 1, 1910.

COLUMBUS, OHIO.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for betterments to the post-office building at Columbus, Ohio, to CHARLES W. GINDELE CO., 3333 La Salle St., Chicago, at $111,832. Time, Dec. 31, 1911.

MISHAWAKA, IND.—The Chicago, South Bend & Northern Indiana Ry. Co. is preparing to let a contract for the erection of a traction station on Third and Main Sts.

INDIANAPOLIS, IND.—William Fuehring, proprietor and owner of the Oneida Hotel, will receive bids for the construction of an addition and complete remodeling of the hotel as soon as plans can be completed. Estimated cost, $45,000.

PERU, IND.—The School Trustees have ordered plans, upon which bids will be invited, for the construction of a 3-story brick school building, 180 × 135 ft., with auditorium, gallery and finished basement. Estimated cost, $100,000.

SOUTH BEND, IND.—The School Trustees, H. F. Elbel, Chn., are preparing to ask for bids for the erection of a school building on the site of the Franklin School building.

ESCANABA, MICH.—M. N. Hunt, Arch., Sault Ste. Marie, Mich., has awarded the following contracts for a warehouse to be erected on Sinclair and Oak Sts. and Northwestern yards, for the National Grocer Co., Amos S. Musselman, Pres.: Excavating, THOMAS MUNGER, Escanaba; pressed brick, RICKETSON & SCHWARZ, Milwaukee, Wis.; building brick, ILLINOIS BRICK CO., Chicago; crushed and building stone, A. R. MOORE, Escanaba; lime, cement and shiplap, STEGATH LUMBER CO., Escanaba; hemlock lumber, J. E. BYRNS, Escanaba; timber, LOCK CITY MFG. CO., Escanaba. The building will be 80 × 140 ft., solid brick construction, pressed brick trimmings and front. J. V. Moran is Mgr.

CHICAGO, ILL.—A building to cost $100,000, to be erected at the northeast corner of Michigan Ave. and 25th St., on property belonging to Mrs. Florence Nelson Page, and to be occupied by the McDuffee Auto Co., agents for the Stoddard-Dayton Co., is announced. The property fronts 75 ft. on Michigan Ave., with a depth of 161 ft.

Plans for a Y. M. C. A. dormitory in Ravenswood, with quarters for 160 guests, have been announced. The building is to cost $95,000 and will adjoin the association's present structure at Wilson and Hermitage Aves. It will be ready for occupancy Nov. 1. The new building will be 161 ft. long and 90 ft. deep. It will contain, in addition to the bedrooms, 15 shower baths. Ground has been broken.

It is stated that Jacob L. Kesner, 75 Monroe St., will erect an 8 to 10-story building, to cost $600,000 and to face 80 ft. on Madison St. and 120 ft. on Fifth Ave.

MILWAUKEE, WIS.—United Theaters Co., New York, has leased the Patterson building at 222-228 West Water St. for a term of years and will remodel it into a vaudeville theater. Plans are being prepared in New York offices.

SIOUX CITY, IOWA.—Within 30 days work will begin on a college building at Sioux City, Iowa, which will cost $150,000 and accommodate 200 students. Thirty acres of land was donated by Sioux City for the college.

ST. PAUL, MINN.—We are officially advised that plans are being prepared by C. H. Johnston, Arch., Manhattan Bldg., for a 3-story pressed brick and cut stone Home for the Aged, to be built at Snelling and Langford Aves. It will have steam heating, electric lighting and be fireproof. Rev. A. G. Pinkham, city, is Pres. Cost, $60,000.

MINNEAPOLIS, MINN.—Long, Lamoreaux & Long, Archs., Minneapolis, have let the contract for a wholesale warehouse for Tibbs, Hutchings & Co. to H. N. LEIGHTON & CO., 213 South Sixth St. The building is to be 132 × 159 ft., eight stories and basement, with sub-basement under a portion. The construction is skeleton frame reinforced concrete with brick curtain walls. Estimated cost, $200,000.

OMAHA, NEB.—E. A. Cudahy has announced that work will be begun at once on the construction of a 10-story building on the Grossman corner at 17th and Douglas Sts. at a cost of $500,000.

SIOUX FALLS, S. DAK.—Postle, Mahler & Denson, Archs., Germania Life Bldg., St. Paul, Minn., have let the contract for the O. S. Jones & Co. seed warehouse at Sioux Falls to the LEONARD CONSTRUCTION CO., 98 Jackson Boulevard, Chicago. The building is 44 × 150 ft., with three stories and basement of reinforced concrete with brick front wall. Estimated cost, $40,000.

NORMAN, OKLA.—Bids are asked by the State Board of Public Affairs until noon, July 31, for erecting the Administration Building of the University of Oklahoma, to be built at Norman. Shepley, Rutan & Coolidge, Corn Exchange Bank Bldg., Chicago, Ill., are Archs.; P. H. Weathers is Arch. State Bd. Pub. Affairs, Guthrie, Okla.

ROSWELL, N. MEX.—The Masonic Lodge has accepted the plans of George W. Roe, Pueblo, Colo., for its proposed 3-story building.

BELLINGHAM, WASH.—J. F. Moore, Arch., has made plans for a $40,000 church building for the Trinity Methodist Church, and work is to be started on same within three or four weeks.

Robert Shields has plans for a $40,000 3-story concrete business block, which he will erect here soon.

SPOKANE, WASH.—Alfred Jones, Mohawk Block, has completed plans for an $85,000 5-story brick building for the Standard Furniture Co., to be erected on Riverside Ave.

R. C. Briggs, 611 Maple St., will erect a 4-story brick block on Wall St., near Third St., to cost $50,000.

SEATTLE, WASH.—We are officially advised that the Washington Securities Co., 406 Crary Bldg., has filed plans for a 10-story steel frame office building, 120 × 108 ft., to cost $400,000. Bids will be received in August. Graham & Myers, Lowman Bldg., are Archs.

We are informed that J. H. Steele, 212 Globe Bldg., has plans filed for a 6-story steel and brick building, 60 × 111 ft., to cost $135,000. J. O. Taft, 409 Arcade Bldg., is Arch. The structure will have basement and sub-basement 23 ft. below street level. The contract for the steel frame has been let to the JOHN EICHLEAY, JR., CO., South 30th and Wharton Sts., Pittsburg, Pa.

PORTLAND, ORE.—W. L. Morgan, Arch., McKay Bldg., has prepared plans for a $40,000 apartment building for Cooke & Lerth.

FRESNO, CAL.—The School Superintendent has recommended an annex to the high school to cost $60,000, and additions to the Lowell and Lincoln schools to cost $18,000 each, out of the $150,000 recently voted for added school facilities.

POMONA, CAL.—The plans for the proposed building for Pomona Valley Hospital Association have been approved by the Board of Directors and physicians of this city. Plans provide for a building to cost about $40,000.

SAN FRANCISCO, CAL.—O'Brien Bros., Archs., 202 Clunie Bldg., have plans for a $75,000 theater building.

A. W. Cornelius, 909 Metropolis Bank Bldg., has plans for a 7-story and basement building for the Federal Security Co.

T. Paterson Ross and A. W. Burgren, 222 Kearney St., are the Architects for the $40,000 apartment house to be erected by B. P. Bosq.

Plans have been drawn by C. A. Meussdorffer, Arch., Humboldt Bank Bldg., for a 6-story and basement apartment house, to be erected on the north side of Sutter St., 167 ft. west of Van Ness Ave., upon the lot which was occupied by Sternheim & Co. after the fire. The building will be of brick, and fireproof throughout. The owner of the property is Mrs. Amelia L. Leszinsky. The estimated cost of the structure is $75,000. The lot has been cleared and it is the purpose of the owner to begin construction of the building as early as possible.

L. H. Sly, 701 Monadnock Bldg., will build a 3-story apartment building to cost $60,000.

SAN JOSE, CAL.—Bids have been received and the contract has been let for the construction of a bank building for the First National Bank to the LEWIS A. HICKS CO., Humboldt Bank Bldg., San Francisco, at $240,000. L. B. Dutton, Chronicle Bldg., San Francisco, Arch. The building will be nine stories in height. The work of tearing down the present bank building will begin at once. The new building will be Class A, fireproof, with steel-frame reinforced by concrete walls. The first floor will be faced with granite, the other eight stories with brick and terra cotta.

TUCSON, ARIZ.—The Elks Lodge of Tucson contemplates the expenditure of $100,000 for erecting a home for Elks.

SALT LAKE CITY, UTAH.—We are officially advised that plans are in preparation for the erection of a 4-story fireproof warehouse, 100 × 120 ft., for the Fireproof Storage & Trust Co., B. F. Redman, Mgr.; F. J. Gustin, Secy. Estimated cost, $60,000. Contracts will be let in about 60 days.

The Board of Directors of the Alta Club have accepted the plans of McDonald & Hale, Archs., Commercial Block, for a $60,000 addition to the club building.

WINNIPEG, MAN.—We are officially advised that W. W. Blair, Arch., Northern Bank Bldg., has completed plans for the Kenmore Apartments, Ltd., for an apartment block to cost about $200,000. The building will be 130 × 120 ft., with five stories and basement. The general contract has been let to the J. McDIARMID CO., Langside and Portage Sts., Winnipeg.

The citizens voted in favor of spending $50,000 for two suburban fire halls. J. E. Buchanan is Fire Chief.

W. W. Blair, Northern Bank Bldg., is preparing plans for an opera house to be built here for the Orpheum circuit and to cost $150,000.

REGINA, SASK.—E. & W. S. Maxwell, Archs., 6 Becker Hall Sq., Montreal, Que., have prepared plans for a hospital to be erected here for the Grey Nuns and to cost $150,000.

EDMONTON, ALTA.—Arrangements have been made between the Canadian Northern and Grand Trunk Pacific Railway companies for a union depot and entrance to this city. M. H. MacLeod is Gen. Mgr., C. N. R., Winnipeg, Man.

The Union Bank has purchased a site on which to erect a $50,000 stone bank building. Plans are being prepared.

NEW WESTMINSTER, B. C.—The Royal Victoria Hospital in this city will be enlarged at a cost of $75,000.

WATER SUPPLY—IRRIGATION.

(** denotes that this work is advertised in Engineering News.*)

BRAINTREE, MASS.—We are officially advised that contract has been awarded by the Board of Water Commissioners for furnishing and laying 8,600 ft. 8-in. c.-i. water pipe, hydrants, special castings, etc., to THOMAS WHELAN & CO., of Quincy, Mass., at $8,745. Bids were opened on July 14.

BOSTON, MASS.—We are officially advised that contracts have been awarded as follows, bids opened on July 12, by the Metropolitan Water & Sewerage Board: For laying 3,900 ft. of 16-in. c.-i. water pipe in Revere, Contract No. 307, and for laying 12,300 ft. of 24-in. in Everett, Chelsea and Revere, to S. CAMOIA & FRANK WILLIAMS, Boston, at $3,111 and $13,197, respectively. Dexter Brackett is Ch. Engr.

NEW YORK, N. Y.—The Board of Estimate and Apportionment on July 2 adopted resolutions providing for appropriations as follows: The sums of $2,026,100 to provide means for furnishing and laying water mains in the Boroughs of Manhattan and The Bronx; $20,000 for improvement of water supply system of Brooklyn Borough, by installing meters in the Ridgewood pumping station and the Millburn pumping station; $60,500 for improving the water supply system of Queens Borough, and $30,000 for making surveys, tests, wells and investigations in connection with the water supply of the Borough of Brooklyn; $623,356 to provide means for an additional supply of water in Brooklyn Borough.

Bids were received on July 14 as follows by John H. O'Brien, Comr Water Supply, Gas and Electricity, for furnishing, delivering and laying water mains and appurtenances in Flatbush, Carlton, Vanderbilt and Atlantic Aves and Pacific St., Borough of Brooklyn: Robert Carter & Co., 551 Prospect Pl., Brooklyn, $19,965; Newman & Carey Co., $20,734; James H. Holmes, $22,121; Murphy Bros., 196 Columbus Ave., New York, $22,214; H. E. Fox, 81 East 125th St., New York, $20,577; James Kelley, 373 Amsterdam Ave., New York, $20,294.

Bids are asked by J. W. Stevenson, Comr. of Bridges, until 2 P. M., July 29, for laying and relaying water mains on the Bronx approach to the Madison Ave. Bridge over the Harlem River.

NEW YORK, N. Y.—Bids are asked by John H. O'Brien, Comr. Water Supply, Gas and Electricity, until 2 p. m., Aug. 4, for furnishing, delivering and installing recording pressure gauges in the Boroughs of Manhattan and The Bronx; for hauling and setting two dock hydrants and appurtenances on Pier 61, East River, and removing two dock hydrants and appurtenances from pier at foot of Rivington St.; for hauling and laying water mains in Arlington, Health, La Salle and McGraw Aves.; in 175th and 208th Sts., and in Broadway; for removing the existing roof over the engine room and the boiler room, remodeling the building and furnishing, delivering and erecting a traveling crane at the 98th St. pumping station, Boro of Manhattan; for hauling and laying water mains and appurtenances in Flatbush Ave. extension, Boro of Brooklyn; and for furnishing and delivering inside screw valves, flexible joint pipe, special castings, valve boxes and covers and hydrant guards or fenders.

PENFIELD, N. Y.—Contract for constructing water-works, bids opened on July 7, has been awarded by the town to HOLLIS & SHEPHERD, of Rochester, at $10,440. R. E. Gaskin, of Pittsford, is Engr.

IRONDEQUOIT, N. Y.—The Town Board has decided to establish a water district for Summerville and Windsor Beach, and has appointed Charles Salmon, Joseph P. Summerhays and W. H. Pringle as Water Commissioners. A water-works system will be constructed at a cost of $18,000, the water to come from Charlotte.

ITHACA, N. Y.—Plans and specifications are being prepared for improving the dam and pipe line. The question of construction has not been finally determined.

WEST CARTHAGE, N. Y.—Due to unexpected complications, all bids for laying 3½ miles of 8 and 10-in. c. i. water pipe and the construction of head-works and standpipe foundation included in the proposed extension of the water-works, advertised to be opened July 9, were returned to bidders unopened. Bids will be readvertised. W. A. Porter is Village Pres. W. G. Stone, Mann Bldg., is Engr.

SYRACUSE, N. Y.—The Board of Contract and Supply on July 6 awarded to JOHN W. DAVIN, JR., 123 Delhi St., the contract for the construction of a conduit to carry Skaneateles water across the southerly section of the city at $16,668. Other bidders were: Albert Gaffey & John P. Byrnes, $26,232; Samuel Bonn, $24,439; Clinton Beckwith, $19,722; Coast & International Contracting Co., $27,915; Lane-Hennessy Co., $22,612; P. R. Kieley, $19,207; Charles T. Hookway, $19,270.

BRIDGEVILLE, DEL.—All bids opened on July 6 for water-works and sewer improvements have been rejected. The following bids were received for the water-works: Pugh & Hubbard, Philadelphia, $20,346; O'Toole & Dempsey, Philadelphia, $18,165; Fritz & Partridge, Dover, N. J., $18,725; Charles Owens, Bridgeville, $18,848; H. A. Miller, Wilmington, Del., $19,401; J. H. Stitzer, Jr., Philadelphia, $19,465; C. F. Bower Construction Co., Philadelphia, $22,490. The lowest bid for the sewer system was submitted by Charles Owens of Bridgeville, at $12,329.

*WASHINGTON, D. C.—Bids will be received by the Commissioners of the District of Columbia until noon, Aug. 7, for furnishing 200 fire hydrants. Forms of proposals, specifications and necessary information may be obtained from Chief Clerk, Engineer Department, Room 427, District Bldg., Washington.

CHESTER, S. C.—Bids will be received at the office of W. A. Latimer, Jr., City Treas., until Aug 3 for furnishing and installing two wood tank gravity filters and turbine pumps, motors, foot valves, gate valves and electrical equipment. James Hamilton is City Engr.

PERRY, GA.—The citizens on July 2 voted to issue $15,000 of bonds for the construction of water-works. Hazlehurst & Anderson, of Atlanta, are Engrs.

MARIETTTA, GA.—The city has retained J. B. McCrary & Co., Empire Bldg., Atlanta, Ga., as consulting engineers for the water-works system. Surveys will be made at once and plans and specifications prepared as soon as possible.

QUINCY, FLA.—It is proposed to spend $36,000 for water-works extensions.

BINGHAMTON (Memphis Post-Office), TENN.—The city has issued $40,000 of bonds to construct the proposed water plant and sewer system. Charles A. Price is Chn. Sewer and Water Comn. J. A. Omberg, Goodwyn Institute, Memphis, is Engr.-in-Charge.

MOUNT PLEASANT, TENN.—We are officially advised that Granberry Jackson, Mount Pleasant, has been employed as engineer to prepare and supervise construction, etc., for proposed gravity water supply for the city of Mount Pleasant, for which work $65,000 of bonds were voted some weeks ago. Eight to ten miles of pipe-line, concrete reservoir, etc., will be required.

BOWLING GREEN, KY.—We are officially advised that Granberry Jackson, Mount Pleasant, Tenn., has awarded contract for a 3,000,000-gallon pressure filtration plant for the city to the ROBERTS FILTER MFG. CO., Philadelphia, Pa. Contract for building for housing this filter has been awarded to F. H. KEISTER, Bowling Green. Contract price on filter was $10,309, and on building, $3,298.

*BRADFORD, OHIO.—Bids will be received until noon, Aug. 10, by the Board of Trustees of Public Affairs for labor and necessary material, including pipes, lead, castings, hydrants, valves, pumps, engines and standpipe and pumping station for a system of water-works.

YOUNGSTOWN, OHIO.—Bids will be received by the Board of Public Service, W. H. McMillin, Clk., until July 23 for furnishing about 250 tons of water pipe and five tons of special castings.

*DETROIT, MICH.—Plans and specifications are on file at the office of Engineering News, New York, for three pumping engines at the new pumping station, each engine to be of 30,000,000 U. S. gallons capacity. Bids are asked until Sept. 14.

EAU CLAIRE, WIS.—Bids will be received at the office of the Water Commission, W. H. Willard, Acting Secy., until July 23 for the construction of a reinforced concrete reservoir.

SHEBOYGAN, WIS.—The Municipal Water Commission awarded contract for new intake into Lake Michigan, 5,000 ft., to STARKE DREDGE & DOCK CO., Milwaukee, Wis., at $7 per lin. ft. for doing the work and furnishing machinery and labor. Cast-iron pipe will be purchased direct by the commission.

ST. JOHN, KAN.—We are officially advised that Burns & McDonnell, Engrs., Scarritt Bldg., Kansas City, Mo., are preparing plans for water-works and lighting plant, and also for sewers, at St. John. Bonds were recently voted for the purpose.

*SCOTTSBLUFF, NEB.—Bids are asked until Aug. 5, by Boyd Ehle, Constr. Supt., J. G. White & Co., Scottsbluff, for constructing a main canal and lateral system. Information may be obtained at the above address or on application to J. G. White & Co., Inc., 43 Exchange Pl., New York.

FORT D. A. RUSSELL, WYO.—Bids were opened as follows on July 8 by the Constructing Quartermaster, Cheyenne, Wyo., for (a) water extension, (b) sewer extension, (c) storm sewer: W. W. Keefe, Cheyenne, (a) $21,242, (b) $17,933, (c) $7,875; Morrison Contracting & Mfg. Co., Denver, Colo., (a) $34,000, (b) $29,825, (c) $10,100; J. J. Hanighen, Omaha, Neb., (a) $23,850, (b) $14,253, (c) $11,163; Peter O'Brien, Denver, (a) $27,000, (b) $15,600, (c) $10,750.

GREAT FALLS, MONT.—The Teton County Canal & Reservoir Co. has been formed with W. S. Cargill at its head. Capital stock, $160,000. It is understood that the company will handle the water for the Conrad Land & Water Co.

MALTA, MONT.—Bids will be received at the office of the U. S. Reclamation Service, Malta, until 2 p. m., July 31, for the construction of canals, waste water ditches and dike in connection with the Dodson South Unit of the Milk River Project, involving the excavation of approximately 400,000 cu. yds. and furnishing of such material and doing of such work as may be necessary for the completion of the work. E. N. Savage is Superv. Engr.

WARRENTON, MO.—We are officially advised that the city is planning to install water and sewer systems. The Fuller-Coult Co., Chemical Bldg., St. Louis, Mo., has been retained as engineers to draw up plans and specifications.

TEMPLE, TEX.—The city has voted $100,000 of bonds for improvements to water-works and will supply the Gulf, Colorado & Santa Fe Ry. Co. with 500,000 gallons daily and population of 20,000. Estimated cost, $250,000. William Guinuth is Mayor.

KINGSVILLE, TEX.—The Kingsville Power Co. has awarded contract to RATHBUN-JONES ENGINEERING CO., Toledo, Ohio, for the installation of complete water-works.

ALBA, TEX.—The city will expend $20,000 for improvements to the water-works, including tank on steel tower; also 4-in. mains will be laid.

HENRYETTTA, OKLA.—We are officially advised that Granberry Jackson, Mount Pleasant, Tenn., has been engaged by the city to furnish plans and supervise the construction of water-works, for which a bond issue of $50,000 was recently voted.

OKEMAH, OKLA.—M. A. Earl, Muskogee, Okla., Consult. Engr., is preparing plans for a system of water-works and electric light plant for Okemah. Estimated cost, $50,000.

CADDO, OKLA.—The city will construct a water-works system to cost $50,000.

BLACKWELL, OKLA.—This place is to have a water-works extension to cost about $30,000.

CANON CITY, COLO.—The Royal Gorge Power Co. has been capitalized at $2,000,000, by G. A. Taft, F. M. McMahon, R. E. Ellison and others. Schuyler & C. Spiess will develop the power systems filed on by the Webster Park Canal & Power Co., and the Grape Creek Pipe Line & Power system. The scheme includes dams, canals and large reservoirs.

*LAMAR, COLO.—Bids are asked until 8 p. m., Aug. 9, by J. F. Curry, Town Clk., for the construction of Sec. No. 2 and Sec. No. 3 of its proposed water system. Sec. 2 consists of nine miles of vitrified pipe line. Sec. No. 3 of a wood covered concrete reservoir twelve feet deep and 230 ft. square.

BENSON, ARIZ.—The Benson Water Co., through its manager, Frank Treat, has made the announcement that it is the intention of the company to extend its water service and also establish an electric lighting plant.

LAS VEGAS, NEV.—The Las Vegas Land & Water Co. is contemplating making improvements in its water system.

MOUNT PLEASANT, UTAH.—The Cedar Creek High Water Irrigation Co., of Mount Pleasant, has been incorporated. Capital, $10,000. Ole Hanson is Pres. C. J. Sorenson is Secy.

BOISE, IDAHO.—The Secretary of the Interior has approved a contract entered into by F. E. Weymouth on behalf of the United States, with the Nampa-Meridian Irrigation District and the Payette-Boise Water Users' Association, which provides for the use by the Government of the canals and laterals of the Nampa-Meridian Irrigation District in the reclamation of certain lands belonging to the Payette-Boise project, Idaho, and for the adjustment of expenses of operation and maintenance of the canals and laterals between the respective parties. The United States is given the right to enlarge or extend the existing canals or laterals of the Nampa-Meridian Irrigation District, the title to all enlargements or extensions to vest in the United States. The lands involved consist of about 50,000 acres lying within the boundaries of the above named irrigation district and below their canal. It was deemed inadvisable for the United States to construct new canals and laterals to irrigate these lands when the work could be done more cheaply by utilizing the canals and laterals of the district.

SEWERAGE.

(denotes that this work is advertised in Engineering News.)*

EAST HARTFORD, CONN.—The East Hartford Fire District has authorized the construction of 1,875 lin. ft. of 4-in. pipe sewer in Roberts St. C. Henry Olmsted, Engr., has been directed to make an investigation and report concerning the installation of a new water-main through Hillstown to Church St. The approximate cost will be $60,000 to $70,000, and the commission has already been empowered to construct the system and to borrow money to pay for it.

FLUSHING (L. I.), N. Y.—The Board of Estimate has adopted a plan for a 6-ft. sewer main to run from Oak St. 1½ miles across low-lying meadows to Flushing Creek, terminating at a point where a branch of Mill Creek unites with Flushing Creek. There it is proposed to build a settling plant. Detailed plans will be prepared at once by the topographical engineers of Queens Borough for presentation at the meeting of the Board of Estimate on Sept. 17.

ATLANTIC CITY, N. J.—Bids will be received by the City Council until Aug. 9, extension of date from July 20, for the construction of a portion of the storm water drainage system for the city. E. D. Rightmire is City Engr.; T. Chalkey Hatton is Consulting Engr., Wilmington, Del.

RIDGEWOOD, N. J.—Contract for constructing about 18,000 ft. of 8 and 10-in. pipe sewers at Ridgewood has been awarded to FRANK PUGLIA, 34 Cross St., Paterson, at $20,000. Bids for the pumping station were received from the Union Bldg. & Construction Co., Passaic, N. J., and from John W. Heller, Newark, and were laid over for further consideration.

*RAHWAY, N. J.—Bids will be received by the Common Council until 8 p. m., Aug. 3, for the construction of 4,300 ft. of vitrified tile pipe sewers, with laterals, manholes and basins, sizes 10-in. to 30-in. Plans and specifications, etc., may be examined at the office of the City Clerk after July 30. Franklin Marsh is City Engr.

BEVERLY, N. J.—We are officially advised that Clyde Potts, 17 Battery Pl., New York, has been retained by this city to design sewers and sewage disposal works. James B. Roberts is Mayor. E. N. Perkins is Clk.

*FORT HANCOCK, N. J.—We are officially advised that bids were received as follows on July 16 by Lieut. W. T. Hawkins, Constructing Q. M., U. S. A., for a sewer outlet here: Bowker Contracting Co., New York, $7,050; Richard Parrott, Newburgh, N. Y., $7,690; The M. McManus Contracting Co., Philadelphia, Pa., $6,495; E. A. Matthews, New York, $8,700; Henry Collins, Brooklyn, $5,996; Frederick S. Wardwell, Stamford, Conn., $8,970; S. A. Bailey, New York, $6,380; Geo. W. Wines, East Quogue, N. Y., $6,180.

WESTFIELD, N. J.—We are officially advised that bids were received as on June 28 by the town for the construction of sewers here. WALTER S. FRENCH, Moorestown, N. J., was awarded contract on July 6, at $19,675.

CARLISLE, PA.—C. A. Bingham, Boro. Engr., is preparing plans for the construction of 5,600 ft. of intercepting sewer.

TITUSVILLE, PA.—BURNS BROS., of New Castle, have secured contract for the construction of a sewer in Brown, E. Elm and Chestnut Sts., about 2,750 ft. 36-in. tile, at $8,728.

KANE, PA.—Bids will be received until July 23 by F. J. Woods, Boro. Secy., for constructing sewers in Poplar, Maple, Beech and five other streets.

FORSYTH, GA.—Bonds to the amount of $15,000 were sold on July 2 for the construction of sewers. The date has not yet been set for receiving bids for the construction of the sewers. Noted on July 8.

CUTHBERT, GA.—It is proposed to install a sewerage system here in a short time. L. J. Martin is City Clk.

MOULTRIE, GA.—We are officially advised that the contract for the sewer pipe for the proposed sewer system has been awarded to H. STEVENS SONS CO., of Macon. N. S. Jaudon & Goss, Atlanta, are Consult. Engrs.

MADISON, FLA.—The city has voted $35,000 of bonds for sewer construction here.

GRENADA, MISS.—Bids are asked by the city until Aug. 2 for the extension of the sewer system. John P. Jones is City Clk.

LOUISVILLE, KY.—The city has awarded contract to the C. T. McCRACKEN CO., Columbus, Ohio, at $80,000 for constructing Section "B," South Louisville branch sewer, and to FRUIN COLNAN CONSTRUCTION CO., St. Louis, Mo., Madison St. sewer, Contract No. 47.

OAKLEY (Cincinnati post-office), OHIO.—The citizens on July 1 voted to issue $13,000 of bonds for the construction of sewers, sidewalk construction and street work.

STRUTHERS, OHIO.—Bids will be received until July 26 by L. S. Creed, Village Clk., for constructing a sewer in Bridge and State Sts., and a storm water sewer through private property.

LEBANON, OHIO.—Bids will be received until July 30 by the village for the construction of 2,225 lin. ft. of sanitary sewers of vitrified tile, 8 to 10-in. M. E. Gustin is Village Clk.

CINCINNATI, OHIO.—Bids will be received until July 26 by the Board of Public Service, John J. Wenner, Clk., for constructing sewers and drains in Vinton St., Fairmount and Seegar Aves., also in Glenway and Grand Aves., Div. 23, District No. 2; also improving trunk sewer and constructing 24-in. pipe sewer in streets and right-of-way.

EVANSVILLE, IND.—Bids are asked until 10 a. m., Aug. 7, by the Department of Public Works, Walter F. Wunderlich, Clk., for constructing three vitrified pipe sewer laterals.

ANDERSON, IND.—The Board of Public Works has ordered plans and specifications on which bids will be received for the construction of a sewer one mile in length in the west end. Estimated cost, $75,000.

NASHVILLE, MICH.—Bids will be received by E. L. Schantz, Village Clk., until July 28 for building approximately 10,560 ft. of 12, 10 and 8-in. sewer and appurtenances.

BEDFORD, IOWA.—Bids will be received until July 27 by Elmer T. Brice, City Clk., for constructing outlet and lateral sewers in Dodge and State Sts., two alleys and right-of-way, requiring 28, 20 and 12-in. vitrified salt-glazed, double-strength stoneware pipe.

FORT DODGE, IOWA.—Bids will be received until July 26 by the City Council for constructing sanitary sewers in Tenth, 14th 15th and several other streets, requiring 12, 10 and 8-in. vitrified pipe. King E. Beal is City Clk.

LAKE CITY, IOWA.—O. Anderson, of Lake City, has prepared plans for 2,600 ft. of 8 to 18-in. sewers.

CANBY, MINN.—Bids will be received by O. N. Rund, City Recdr., until Aug. 2 for the construction of sewers here.

NORTON, KAN.—We are officially advised that plans are being prepared for a complete sewer system for Norton by The J. S. Worley Co., 207 Reliance Bldg., Kansas City, Mo.

WICHITA, KAN.—H. H. Jackman, Consult. Engr., of Wichita, has submitted to the City Commissioners plans and specifications for the College Hill sanitary sewer. Estimated cost, $400,000. The entire length of all the mains and laterals will be about 77 miles.

LIBERTY, MO.—We are officially advised that sewer work was let on July 16 by the city to the following: R. J. & W. M. BOYD CONSTRUCTION CO., 200 Southwest Boulevard, Kansas City Mo., District No. 1; MICHAEL WALSH, Kansas City, District No. 2; A. D. JOHNSON CONSTRUCTION CO., Kansas City, district No. 3; EDGAR MAIN, Liberty, district No. 4. E. H. Collins, Liberty, is Engr.

DALLAS, TEX.—The Board of Municipal Commissioners has adopted the report of J. M. Preston, City Engr. and the recommendation of Dan F. Sullivan, Water Comr., for the construction of the sanitary sewer system to provide for Fair Park, Exposition Park and South Dallas to the river. The system will comprise 6,700 ft. of 12-in. sewer and 1,500 ft. of 8-in., two laterals about 200 ft. long. Estimated cost, $6,200.

CLINTON, OKLA.—The City Council has authorized the issuance of $25,000 of sewer bonds.

HOLDENVILLE, OKLA.—The city has awarded contract to J. R. STONE, Muskogee, Okla., for constructing a sanitary sewer system here at $14,500.

SAN FRANCISCO, CAL.—The Board of Public Works on July 9 awarded contract for sewer construction in Fifth St., between Howard and Market Sts., to the HEALY-TIBBITTS CONSTRUCTION CO., 268 Market St., San Francisco, at $28,359.

G. W. McGIN & CO. were awarded contract for the construction of sewers in Greenwich and Octavia Sts., at $7,710. Marsden Manson is City Engr.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

HUDSON, N. H.—Bids will be received until July 26 by A. W. Dean, State Engr., Concord, for grading and surfacing with trap rock a portion of Central St., town of Hudson.

NEW BEDFORD, MASS.—Contracts are stated to have been awarded as follows for furnishing granite paving blocks to the Street Department: JOHN B. SULLIVAN & SON, for 100,000 blocks at $71.75 per M.; NEW BEDFORD & DARTMOUTH GRANITE CO., for 100,000 blocks at $69.50 per M.; and BUZZARDS BAY PINK GRANITE CO., for 120,000 large blocks at $60.90 per M., and 88,000 small blocks at $1.30 per sq. yd.

HARTFORD, CONN.—Bids for state road work will be received at the office of the State Highway Commissioner until 2 p. m., July 22, as follows: Town of Hebron, 3,300 lin. ft. gravel and 4,371 lin. ft. of graded road, including one 15-in culvert; Town of Vernon, 5,222 lin. ft. macadam road; town of Redding, 2,700 lin. ft. graded road including two 15-in. tile culverts; town of Southington, 9,104 lin. ft. macadam; town of Easton, 1,450 lin. ft. of heavy grading, including two 24-in. tile culverts; town of Norfolk, 2,600 lin. ft. macadam, including two 24-in. and three 18-in. tile culverts; city of New Britain, 3,035 lin. ft. macadam.

Contracts for the construction of state road work, bids for which were opened on July 16, have been awarded by the State Highway Commissioner as follows: Town of Milford, 10,005 lin. ft. macadam and telford, including seven 30-in., two 18-in. and three 15-in. tile culverts, cobble gutters, railing and masonry work, to F. ARRIGONI & BRO., Durham, Conn., at $1.95 per lin. ft. for macadam, $2.45 per lin. ft. for telford, 60 cts. per sq. yd. for gutters, 38 cts. lin. ft. for railing, $5 cu. yd. for masonry. E. N. Clarke, Milford, Conn., the only other bidder, submitted these figures: $2.25, $2.70, 60 cts., 40 cts. and $5; town of Orange, 7,250 lin. ft. macadam and telford road on the Derby turnpike, to C. W. BLAKESLEE & SONS, New Haven, at $3.45 per lin. ft. for macadam, $3.95 lin. ft. for telford, 60 cts. per sq. yd. for cobble gutters and 35 cts. per lin. ft. for railing. No other bidders; town of Old Saybrook, 10,000 lin. ft. macadam and telford on the Ferry Road, to BENNETT N. BEARD CO., Shelton, at $1.38 per lin. ft. for macadam, $1.85 per lin. ft. for telford, 60 cts per lin. ft. for gutters. Other bidders were: Pierson Engineering & Construction Co., Bristol, $1.78, $2.18 and 65 cts.; Lane Construction Corporation, Meriden, $1.40, $1.70 and 60 cts.; Amos Bridge's Sons, Hazardville, $1.48, $1.98 and 65 cts.; E. A. Douglass, Glastonbury, $1.38, $2.20 and 55 cts.; A. Brazos & Sons, Middletown, $1.74, $2.10 and 80 cts.; Trinity Highway Construction Co., Hartford, $1.48, $2.20 and 50 cts.; Roger Kennedy, Middletown, $1.73, $2.50.

NEW BRIGHTON (S. I.), N. Y.—Bids are asked by George Cromwell, Pres. Boro. of Richmond, until noon, July 27, for furnishing and delivering 20,000 gallons of bituminous road surfacing material (binder).

NEW YORK, N. Y.—Bids are asked until 3 p. m., July 29, by the Park Board for furnishing all the labor and materials for resurfacing the old walks in and around Prospect Park Plaza, Boro. of Brooklyn.

BROOKLYN, N. Y.—Bids were opened on July 8 by the Commissioners of Parks, New York City, for regulating, grading, paving with macadam pavement, etc., the Bay Ridge Parkway, between Fourth and Hamilton Aves., Brooklyn Borough. The lowest bid submitted was that of Robertson & Gerehart Contracting Co., 186 Remsen St., Brooklyn, as follows: 55,275 cu. yds. excavation, 57 cts.; 18,736 sq. yds. macadam pavement, 63 cts.; 2,700 sq. yds. vitrified brick pavement, $2.75; 5,640 lin. ft. 12-in. vitrified sewer pipe, 75 cts.; 4,600 lin. ft. 4-in. c.-i. water pipe, 65 cts.; 650 lin. ft. 1-in. galvanized w.-i. pipe, 12 cts.; 42 park inlet basins, each, $35; four sewer manholes, each, $40; 10,000 cu. yds. top soil, 80 cts. Total, including hydrants and valves, $67,992. Other bidders were: Cooper & Evans Co., 220 Broadway, New York, $84,702; John M. Fox, 270 Herkimer St., Brooklyn, $73,401; Frank J. Gallagher, 574 Park Pl., Brooklyn, $101,215; Long Island Contracting & Supply Co., 847 Boulevard, Long Island City, $89,469; Henry J. Mullen, 289 Fulton St., Jamaica, $80,052; Norton & Gorman Contracting Co., 339 Douglass St., Brooklyn, $68,632.

BROOKLYN, N. Y.—Bids are asked until 11 a. m., Aug. 4, by Bird S. Coler, Boro. Pres., for laying crosswalks on both sides of Ave. D, at the following streets: East 28th St., East 29th St., East 31st St., East 34th St., East 35th St., Brooklyn Ave., East 38th St., and East 39th St., together with all work incidental thereto; for regulating and repaving with asphalt pavement on a concrete foundation the roadway of Moffat St., from Central Ave. to Knickerbocker Ave., together with all work incidental thereto; for constructing cement sidewalks on both sides of Prospect Pl., between Albany and Troy Aves., where not already done, and on various other streets in the Boro of Brooklyn; for regulating, grading, curbing and laying sidewalks, where not already done on East 4th St., from Ave. D (Cortelyou Road) to a point 240 ft., more or less, north of Ave. F, together with all work incidental thereto.

TROY, N. Y.—The Board of Contract and Supply on July 2 opened bids as follows for paving King St., price per sq. yd. on paving: John H. Gleason & Co., curb, 90 cts. lin. ft.; granite block, including excavation, $2.80; brick, $2.54; sheet asphalt, $2.72; relaid granite block, $1.45; wood blocks, $3; E. H. McKenna, curb, 87 cts.; relaid granite block, $1.40; Hasam Paving Co., curb, 90 cts.; granite block, $2.90; cement, $1.80; relaid granite block, $1.75.

TROY, N. Y.—The contract has been let to the NORTH HUDSON CONTRACTING CO., at $2.33 per sq. yd., for repairing the asphalt pavements in this city.

BUFFALO, N. Y.—Bids will be received until July 23 by the Department of Public Works, Francis G. Ward, Comr., as follows: Repair of asphalt pavements maintained by the Department of Public Works for the fiscal year ending June 30, 1910; cutting out asphalt surface on concrete base; skimming wearing surface with heater.

ROCHESTER, N. Y.—The Board of Contract and Supply on July 9 awarded contract for paving East Ave. and Edgerton St. to WHITMORE, RAUBER & VICINUS, 279 South Ave., at $35,020.

PHILMONT, N. Y.—Bids are asked until noon, July 31, by E. S. Simmons, Village Trustee, for constructing 825 ft. of concrete walks on Church St.

UTICA, N. Y.—We are officially advised that all bids received on July 15 by the Park Board, W. H. Morton, Secy., to construct Utica Parkway from Genesee to Elm Sts., including laying approximately 16,000 sq. yds. of bituminous macadam and various other items were rejected. The bids follow: Utica Engineering & Construction Co., $28,425; James E. Martin, $30,350; Barber Asphalt Paving Co., $25,609; Newport Construction Co., $24,601; J. R. Baxter, Jr., $24,976; H. W. Roberts & Co., $25,874; Warren Bros., "Warrenite," $30,872; H. W. Roberts Co., "Bituminite," $22,399.

ALBANY, N. Y.—Bids are asked by the State Highway Commission, 53 Lancaster St., Albany, until 1 p. m., Aug. 6, for the repair or resurfacing of the following state highways: Ontario County, Bristol road No. 187, town of Canandaigua; Bristol Valley road No. 188, town of East Bloomfield; Honeoye-Hemlock road No. 191, town of Richmond; Geneva-Canandaigua road No. 207, Section 2, towns of Hopewell and Canandaigua; Geneva-Canandaigua road No. 146, Section 2, town of Seneca. Chenango County, Greene-Smithville Falls road No. 218, towns of Greene and Smithville; Oxford-McDonough road No. 224, towns of Oxford, Preston and McDonough; Norwich-Plymouth road No. 112, towns of Norwich and Plymouth; Norwich-Preston road No. 598, towns of Norwich and Preston. S. Percy Hooker is Chn. Comn.

ALBANY, N. Y.—Bids are asked by the Board of Contract and Supply until 3 p. m., July 28, on street improvement work as follows: Improvement of portions of Montgomery St., Lincoln Ave., Mohawk St., and Washington Ave. The work calls for excavation, grading and paving the carriageways with vitrified paving blocks, laying sidewalks with flags, vitrified bricks and concrete, building receiving basins and laying vitrified pipe and stone ware sewers and water services. Bids are also asked for the repaving of the Knox St. viaduct with vitrified paving blocks; laying a vitrified stoneware pipe sewer in Park Ave., and also a similar sewer in West St. Walter Melins is City Engr.

CATSKILL, N. Y.—We are officially advised that GEORGE W. HOLDRIDGE, Catskill, was awarded contract on July 15 by the Board of Trustees for paving with brick a portion of Main and Bridge Sts., 4,703 sq. yds., at $10,770 (including electric railway space), and $9,380 (omitting railway space).

*HOHOKUS, N. J.—Bids are asked until 8 p. m., July 26, by the Borough Council, Hohokus, for the laying of about 25,000 lin. ft. of curb and about 100,000 sq. ft. of sidewalks, with the required grading of sidewalks and the necessary pipe and basins for drainage. William H. Deer is Boro. Clerk; William Ferguson & Son, 152 Market St., Paterson, N. J., are Boro. Engrs. Plans and specifications are on file at the office of Engineering News, New York.

ATLANTIC CITY, N. J.—Contract for grading and graveling the Chestnut Neck Road, bids opened on July 7, has been awarded to GEORGE HANSELMAN, of Cologne, N. J., at $5,143.

*LANSDOWNE, PA.—Bids will be received by the Borough Council of Lansdowne until 8.30 p. m., Aug. 6, for paving Baltimore Ave., from Shadeland Ave. to Union Ave., the approximate quantities of the work to be done as follows: 21,000 sq. yds. of pavement, 7,500 cu. yds. of excavating, bidders to submit bids for bitulithic pavement, also for repressed vitrified shale or fire clay blocks, all paving to be upon concrete foundations, according to borough specifications. Specifications for above work can be procured from T. C. Janvier, Boro. Engr., Lansdowne, also John W. Davis, Boro. Secy., 149 South Front St., Philadelphia, Pa.

*MEADVILLE, PA.—Bids are asked by the Selectmen and Common Councils until 8 p. m., July 28, for paving certain sections of Poplar St., Arch St. and all of Alden St. with vitrified brick. Approximately 10,000 yds. Plans and specifications now on file in the engineer's office. H. S. Robinson is City Clk.

DUNMORE, PA.—We are officially advised that McCONVILLE & FITZPATRICK, of Pittston, Pa., have secured contract for about one mile of paving, Nay Aug brick, at $33,722.

PHILADELPHIA, PA.—Bids are asked by the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 a. m., Aug. 14, for street paving, curbing, railroad track and drains at navy yard, Philadelphia. R. C. Hollyday is Ch. Bureau. Specifications are on file at the office of Engineering News, New York.

ELLICOTT CITY, MD.—Bids will be received until July 27 by the Board of County Commissioners, T. Hunt Mayfield, Clk., for improving the Daisy Road, requiring the macadamizing of about three miles of road.

HAMPTON, VA.—The Board of Supervisors of Elizabeth City and County on July 7 awarded contract for constructing 3½ miles of stone road between Hampton and Newport News to G. F. TRICE & CO., of Hampton, at $23,300.

ORANGE, VA.—The Madison district of Orange County has voted $25,000 of bonds to complete the macadamized road between Gordonsville and Orange and construct several miles of roads leading into the two cities.

ROANOKE, VA.—The city has awarded contract to O. MARKLEY, of Roanoke, at $1.60 per yd. to lay cement pavement along 15th Ave.

BASIC CITY, VA.—Bids will be received until July 24 by the State Highway Commission, Richmond, P. St. J. Wilson, Chn., for constructing about nine miles of macadam road in Augusta, Nelson and Albemarle Counties, running from Basic City, Augusta County, to a point near Greenwood, Albemarle County.

GOLDSBORO, N. C.—Bids are asked until noon, Aug. 2, by D. J. Broadhurst, City Clk., for constructing about 60,000 sq. ft. of concrete sidewalk.

JACKSONVILLE, FLA.—The Board of Public Works has awarded contract to the SOUTHERN CLAY MFG. CO., of Jacksonville, to pave 37,687 sq. yds. of streets, and to GEORGIA ENGINEERING CO., Augusta, Ga., to pave 40,381 sq. yds., all with vitrified brick. Bids were opened on July 6.

TROY, ALA.—Pike County has voted $50,000 of bonds for road construction.

HARRISONBURG, LA.—The Police Jury has appropriated $12,000 to be used for the construction of roads and have contracted with REEVES & CO., Columbus, Ind., for road machinery amounting to $4,000. The company is to build as part of contract three miles of model road north of Trinity.

NEW ORLEANS, LA.—JOHNCKE & SCHAFF, of New Orleans, have been awarded contract at $12,000 for laying sidewalks, copings and sodding grounds around the courthouse, now completed.

CHATTANOOGA, TENN.—The city has awarded contract to SOUTHERN PAVING & CONSTRUCTION CO., First National Bank Bldg., Chattanooga, at $25,500 for asphalt resurfacing and new asphalt paving on Georgia Ave., Eleventh, A and Columbia Sts., total length, 2,475 ft. H. F. Van Dusen is Chn. Bd. Pub. Wks.

The Chattanooga & Tennessee River Power Co., according to the "Manufacturers' Record," is proceeding with the construction of proposed automobile road from city to lock and dam, passing through Hooker, Whiteside, Vulcan and Rankins Ferry, last named being terminal. Established highways will be used greater part of distance and will be improved. The road will be graded, ballasted and surfaced with chert and it is proposed to extend road to Nashville, the plan being to connect from Rankins Ferry with established highway to Jasper, and from there Marion County authorities have agreed to construct road to Monteagle, from which point to Nashville the road is already built.

COLUMBUS, OHIO.—Bids are asked until 2. p. m., July 23, by F. M. Sayre, County Audr., for the following work: Engineer's estimate, No. 1067, resurfacing the Porter pike for the Worthington and Delaware County road to the Shrock and Linwood pikes, a distance of 3,165 ft., located in Sharon Township, the work requiring 1,050 tons crushed limestone, 400 tons crushed limestone screenings; Engineer's estimate No. 1068, resurfacing the Chillicothe Pike from the Hocking Valley Ry. tracks southerly a distance of 3,000 ft., in Marion Township, the work requiring 1,200 tons crushed limestone, 360 tons screened limestone screenings, 16,000 gallons Tarvia X or Carbo-Via No. 3.

COLUMBUS, OHIO.—Bids were opened on July 2 by the County Commissioners, John Scott, Clk., for grading, macadamizing and improving the Sunbury road, a distance of five miles in Mifflin Township. Contract has been awarded to the REED CONSTRUCTION CO., of Westerville.

HAMILTON, OHIO.—Bids will be received until July 27 by the Board of County Commissioners, Hamilton, for resurfacing the High and Main St. bridge over the Great Miami River at Hamilton with creosoted wood blocks.

COLUMBUS, OHIO.—We are officially advised that the State Highway Department has awarded contract to CARROLL & GRUBER, of Caledonia, Ohio, for State Highway "C," Olivesburg road, at $12,990. Bids were opened on July 13.

The State Highway Department on July 15 rejected all bids for State Highway "C," Jefferson Southern road, on account of all of the bids for tar treatment being in excess of the estimate and it being considered desirable to receive bids on tar treatment, it was decided by the State Highway Commissioner, with the approval of the County Commissioners, to reject all of the bids received and re-estimate the work and to prepare a new final resolution, preliminary to readvertising same.

VAN WERT, OHIO.—Bids are asked until noon, July 23, by the Board of Public Service, C. M. Drury, Clk., for paving North Washington St., the engineer's estimate of cost being as follows: Excavation, 7,500 cu. yds., $3,555; stone and screenings, foundation and cushion, 4,709 cu. yds., $7,502; vitrified brick or block pavement and filler, $13,238; curbing, 5 in. × 22 in., straight, 6,850 ft., $3,420; curbing, 5 in. × 18 in., straight, 617 ft., $309; curbing, 5 in. × 22 in., circular, 6-ft. radius, 210 ft., $207; curbing, 5 in. × 22 in., circular, 4-ft. radius, 60 ft., $60; curbing, retainer or head, 5 in. × 20 in., straight, 490 ft., $245; 7,400 ft. 6-in. tile (land) and labor, $335; catch basins, complete, including cover, $180; sewer pipe, cemented joints for draining and catch basin connections, $1,070; 1,250 ft. 10-in. sewer, 3,600 ft. 8-in. sewer and 2,550 ft. 6-in. sewer, laid to grade and joints cemented, back filled and tamped.

EAST PALESTINE, OHIO.—We are officially advised that contract has been awarded by the State Highway Department, Columbus, to McLANE & ARMSTRONG, of Lisbon, for State Highway "D," East Palestine road at $18,000, using concrete foundation and Minerva or Medal block. Bids were opened on July 14.

PAOLI, IND.—The Commissioners of Orange County will receive bids until 2 p. m., Aug. 3, for the construction of 2,685 ft. of gravel road in Stampers Creek township, known as the Cambersburg road. Alvin B. Ham is County Audr.

GREENCASTLE, IND.—The Commissioners of Putnam County will receive bids until 11 a. m., Aug. 2, for the construction of 8,717.6 ft. of macadam road in Jackson Township, known as the Barker road, and also for the construction of 7,208.8 ft. of macadam road in Greencastle, Warren and Jefferson Townships, known as the F. P. Farmer road. D. V. Moffett is County Audr.

CRAWFORDSVILLE, IND.—Bids will be received until Aug. 3 by the Board of County Commissioners for constructing a highway in Ripley Township. Bennet B. Engle is County Audr.

TERRE HAUTE, IND.—Bids will be received until July 24 by the Board of County Commissioners for grading and graveling the Felling and Fag roads, Lost Creek Township, one and 1½ miles in length, respectively. Nathan G. Wallace is County Audr.

VERSAILLES, IND.—The Board of County Commissioners will receive bids until Aug. 3 for constructing 12,907 ft. and 7,718 ft., respectively, of macadamized road in Adams Township. Nicholas Volz is County Audr.

MONTEZUMA, IOWA.—Bids are asked until 1.30 p. m., July 24, by Fred Carr, Mayor, for constructing about 27,000 sq. yds. of brick block pavement and 1,000 yds. of concrete pavement.

*GRINNELL, IOWA.—Bids will be received by the city until 7.30 p. m., July 26, for street improvements, including 92,000 yds. of Warren's bitulithic pavement, laid on 5-in. concrete base and 53,000 ft. of combined concrete curb and gutter. A. C. Harriman is City Clk.

GRAND ISLAND, NEB.—M. FORD, of Cedar Rapids, Iowa, has secured contract for 31,246 sq. yds. brick paving at $2.08 per sq. yd. Bids were opened on July 7.

MEXIA, TEX.—The city has voted $20,000 of bonds for street improvements and cement sidewalks.

MARLIN, TEX.—J. E. HOLLERS, Denton, Tex., has received contract at 8½ cts. per sq. ft. for construction of five miles or more of cement sidewalk 4 ft. wide, gravel to be furnished and delivered by city. F. S. Heffner is Mayor.

GALVESTON, TEX.—V. E. Austin, Comr. of Sts. and Public Property, has recommended that contract for paving Ave. E with vitrified brick be awarded to KELSI & VAUTRIN, of Galveston, at $18,826 with asphalt filler or at $17,526 with cement grout filler.

LOS ANGELES, CAL.—Bids will be received by the Board of County Supervisors, C. G. Keys, Clk., until Aug. 2 for furnishing and delivering broken stone to be used in the construction of main highways.

SAN FRANCISCO, CAL.—FLINT & TREACY have been awarded contract at $8,492 by the city for paving South Second St., from King St. south to bulkheads. Marsden Manson is City Engr.

SALT LAKE CITY, UTAH.—We are officially advised that J. D. Hanley, Salt Lake City, has submitted the lowest bid to the Board of Public Works for paving extension No. 58, at $5,079.

SALT LAKE CITY, UTAH.—We are officially advised that the James Kennedy Construction Co., Fargo, N. Dak., was the lowest bidder on July 9 for sidewalk extension No. 126 at $103,211. L. C. Kelsey is City Engr.

MANUFACTURING PLANTS.

(** denotes that this work is advertised in Engineering News.*)

MIDDLEBURY, VT.—The Middlebury Marble Co., capitalized at $1,000,000, which owns marble property in Pittsford, North Middlebury and New Haven, is making extensive preparations to work its property, and in addition to placing large orders for equipment, will build a mill at Middlebury about Oct. 1. Estimated cost of improvements, about $500,000.

FRANKLIN, MASS.—The Franklin Felt Co., Franklin, has plans prepared by Charles T. Main, mill engineer and architect, Boston, for a new felt mill. These call for three buildings, 168 ft. × 60 ft., 260 × 60 ft., both of one story; 50 × 65 ft., two stories; an engine house, 40 × 40 ft., and a boiler house, 46 ×50 ft., with brick stack.

LAWRENCE, MASS.—The contract for building the dyehouse for the Bigelow Carpet Co., Lawrence, from plans by Charles T. Main, mill engineer and architect, Boston, has been let to W. N. PIKE & SONS, Lawrence, Mass. It is expected that work will begin immediately.

NEW BRITAIN, CONN.—The Parker Shirt Co. has had plans prepared for a 3-story brick factory, 42 × 60 ft. Work will be started at once.

SOUTHINGTON, CONN.—The Southington Industrial Co. has had plans prepared by C. A. Bloomfield, Arch., Meriden, for a brick building, 80 × 40 ft.

NEW HAVEN, CONN.—Permits have been issued to the Winchester Repeating Arms Co. for the erection of two additions to their factory on Winchester Ave., same to be of mill construction, 60 × 288 ft., two stories high.

BUFFALO, N. Y.—The American Agricultural Chemical Co. has let contract to MOSIER & SUMMERS, 1266 Seneca St., for a 3-story brick and concrete extension, 120 × 127 ft., to acid department of its fertilizer works, Babcock St. and Erie R. R. Cost, $50,000.

Plans have been prepared by the Worden-Allen Co., Milwaukee, Wis., for bridge fabricating shop of brick and structural steel to cost $100,000, which will be erected by the LACKAWANNA BRIDGE CO. at Abby and Bell Sts. and the South Buffalo R. R.

BUFFALO, N. Y.—In addition to the car repair shop and mill, 84 × 480 ft., at East Buffalo, for which the Delaware, Lackawanna & Western R. R. Co. is about to let contracts, the company will build a 2-story brick storehouse and office building, 30 × 75 ft., to cost $15,000, and a 1-story and basement oil storage building, 27 × 47 ft., to cost $5,000. F. D. Nies, Hoboken, N. J., is Arch.

SCHENECTADY, N. Y.—The General Electric Co. will shortly begin a general work of improvement in and about its grounds in this city. The old buildings at the approach to the works are to be torn down and a new line of double tracks to provide better railway facilities will be laid. This work will be in connection with the widening of the lower portion of Dock St. soon to be undertaken by the city authorities. It is estimated that the work will cost about $150,000. Marcus T. Reynolds, of Albany, is Arch. for the work to be done by the General Electric Co.

SCHENECTADY, N. Y.—BROWN & LOWE, of Schenectady, N. Y., have been awarded contract for constructing the new 4-story factory building, to be erected on Dock St., by the Mohawk Overall Co.

ROCHESTER, N. Y.—It is stated that the National Chicle Co., 111 North Water St., contemplates the erection of a new factory building of reinforced concrete and steel on Monroe Ave. near Alexander St., to cost about $500,000. Architect not yet selected.

Archts. Chas. F. Crandall and John F. Strobel, Jr., 400 Ellwanger and Barry Bldg., have completed plans and will receive bids at once for plant for the American Laundry Machinery Co. to be built on Buffalo road opposite Kossuth St., consisting of 1 and 2-story buildings of brick, structural steel and reinforced concrete. Estimated cost, $200,000.

NEW YORK, N. Y.—We are officially advised that Marvin, Davis & Turton, Archs., 1133 Broadway, New York, have awarded contract to W. A. L'HOMMEDIEU, 1 Madison Ave., New York, for the construction of mill buildings to be erected at Bronx Boulevard and East 216th St., Williamsbridge, New York, for the Vari Lace Mfg. Co. Cost, $50,000.

SYRACUSE, N. Y.—Tabor & Babcock, 701 Onondaga County Savings Bank Bldg., have plans and specifications ready for 1-story office and factory building for the Syracuse Safe Co., 325 × 75 ft., monitor roof, steel framed building, brick filling and well lighted by glass, plumbing low pressure steam heat, concrete floor and foundation. All machinery electrical driven, individual.

CLARKSBURG, W. VA.—The Hazel-Atlas Glass Co. will erect a $75,000 fireproof structure at Clarksburg. It will be a 1-story and basement building, 70 × 158 ft.

WINSTON, N. C.—The project for a cotton mill here, headed by Mr. J. W. Cannon, of Concord, associated with Winston-Salem capitalists, is practically assured. It is reported that $125,000 will be the paid-in capital stock to start with.

CENTRAL, S. C.—The Issaqueena Mill, of Central, will build a 175-ft. addition to main structure and install about 12,000 spindles, 300 looms, carding machinery, etc., increasing the equipment of the plant to 25,000 spindles and 700 looms. It has engaged O. A. Robbins, of Charlotte, N. C., as the engineer in charge of the enlargement. He has not yet completed the plans and specifications. The improvements will include the erection of twenty cottages for operatives.

DOUGLASVILLE, GA.—The Lois Cotton Mills will add 10,000 spindles and 250 looms, doubling its equipment. It has awarded contracts for the new machinery.

SHREVEPORT, LA.—The Kansas City Southern Ry. Co. will spend about $1,000,000 in rebuilding and enlarging its shops and trackage facilities at Shreveport.

YOUNGSTOWN, OHIO.—The Vindicator Printing Co., publishers of the Daily, Semi-Weekly and Sunday Vindicator, will erect at once an addition to its plant which will double the floor space. The structure will be fireproof and three stories high with basement, all to be devoted to the printing business.

NEW ALBANY, IND.—The Miles Casting Co., of Middletown, Ohio, is planning to erect a plant near this city on the Pennsylvania R. R. to manufacture steel gears for electric cars and castings. Cost, $200,000.

BEDFORD, IND.—W. S. Shrome is planning to ask for bids for the construction of a factory in this city.

BLOOMINGTON, IND.—The Chicago, Indianapolis & Louisville R. R. Co. has let contract to W. F. STILWELL, Lafayette, Ind., for the construction of a 17-stall engine house with concrete foundation, brick walls and timber roof, and the turntable foundation and cinder and coal pit in connection with the same. The contract is for ... and improvements in the yard will increase the total cost to about $100,000.

INDIANAPOLIS, IND.—D. M. Parry, former president of the National Manufacturers' Association, announces that he will build a large automobile factory in this city. Estimated cost of factory and equipment, $1,000,000.

INDIANAPOLIS, IND.—The National Creosoting Co., recently incorporated, is preparing to ask for bids for the erection and equipment of a creosoting plant. A. T. Hert, Louisville, Richard V. Look and Harry Griffith, Chicago, are directors.

MICHIGAN CITY, IND.—The Murdock Interurban Co. will soon ask for bids for the erection of large car barns.

EVANSVILLE, IND.—Beach & Fuller Co. announce that bids will soon be asked for the construction of a new factory on the site of the plant recently destroyed by fire.

ELKHART, IND.—The Crow Motor Car Co., recently incorporated, will receive bids for the erection of a large factory as soon as plans can be completed. E. C. Crow is Pres.

MILWAUKEE, WIS.—Ferry & Clas, Archs., 416 Broadway, Milwaukee, have completed plans for three buildings for the Beuder, Paeschke & Frey Mfg. Co., ... St. and St. Paul Ave., Milwaukee, as follows: Factory No. 14, four stories, 130 × 1..., cost, $44,000; galvanizing room No. ..., one story, 40 × 110 ft., cost, $3,500; p... room No. 15, one story, 40 × 60 ft., $.... No contracts, company will do its own work.

JANESVILLE, WIS.—A. ... Conover, Arch., Madison, Wis., has awarded general contract on addition to plant of Wisconsin Carriage Co., Janesville, to ...D & BOOS, general contractors, Janesville. Dimensions, 80 × 100 ft., three stories h... reinforced-concrete construction. Cost, ...000.

OMAHA, NEB.—The Omaha & Council Bluffs St. Ry. Co., Omaha, ... awarded to F. B. BURNESS, Kansas City, Mo., the contract for a 2-story car house to be built at Tenth St. and Pierce St. The building will be of reinforced-concrete construction and will cost $150,000.

ABERDEEN, S. DAK.—The Aberdeen Publishing Co., publishers of the daily and weekly American, has let contract to the STOVER CONSTRUCTION CO. for a building of reinforced concrete, two stories and basement, in which the publications will be housed. Contract price, $15,000.

EL RENO, OKLA.—The Apache Granite Co. has completed arrangements for the construction in this city of a model modern granite factory, and work on the new building will begin within a short time.

LOS ANGELES, CAL.—A cement manufacturing plant to cost about $700,000 will be erected immediately in Los Angeles, by the Victor Portland Cement Co., Central Bldg. It will have an initial capacity of 1,500 barrels daily.

EL CENTRO, CAL.—The Imperial Valley Alfalfa Meal Milling Co., recently formed with a capitalization of $50,000, will soon commence the erection of a 3-story mill building and install modern machinery. W. C. Whitescarver, C. C. Bradford, J. J. Chappell and F. E. Fuller, of El Centro, and J. S. East, of San Francisco, are interested.

MOSCOW, IDAHO.—The National Harvester Co. has awarded contract to A. S. WHITOWAY & CO., of Boise, Idaho, for construction of three new concrete, reinforced with steel, factory buildings, at a cost of $25,000. Work will be rushed so that the company may install machinery and commence work for next year's business.

WINNIPEG, MAN.—The Norris Elevator Co., of this city, will build five elevators this year on the line of the Alberta R. R. & Irrigation Co.

MISCELLANEOUS CONTRACTS.

(** denotes that this work is advertised in Engineering News.*)

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

*DREDGING.—Wilmington, Del.—Bids are asked until 10 a. m., Aug. 9, by Capt. L. H. Rand, Corps Engrs., U. S. A., for dredging Cooper Creek, N. J.

*SNAGBOAT.—Dallas, Tex.—Bids are asked by Capt. A. E. Waldron, Corps Engrs., until noon, Aug. 10, for construction complete of wooden snagboat.

*DREDGING.—Oswego, N. Y.—Bids are asked until 11 a. m., Aug. 9, by Col. W. L. Fisk, Corps Engrs., U. S. A., for dredging in Charlotte Harbor, N. Y.

*DREDGING.—Galveston, Tex.—Bids are asked until noon, Aug. 9, by Capt. John C. Oakes, Corps Engrs., U. S. A., for redredging Port Bolivar Channel, Tex.

GRADING.—Carbon, Ind.—The contract has been let to HARVEY HAWKINS at $10,479, for a mile of grading for a railroad switch at Rosedale for the Vandalia R. R. Co.

HOSE, REELS, ETC.—St. Henry, Ohio.—Bids are asked until noon, Aug. 3, for samples of hose, nozzles and reels. Village expects to purchase 1,000 ft. of hose. Wm. H. Romer, Clk.

LEVEE.—Van Buren, Ark.—The Crawford County Levee Commissioners have awarded contract to A. H. MORROW, Pine Bluff, Ark., for completion of Crawford County levee, at $209,600.

SEAWALL.—San Francisco, Cal.—The Harbor Board has awarded contract for construction of Sec. 11 of the seawall to the HEALY-TIBBITTS CONSTRUCTION CO., San Francisco, at $94,045.

GRANDSTAND.—Connersville, Ind.—The Free Fair Association has let the contract for the construction of the Roberts Park grandstand to the PAN-AMERICAN BRIDGE CO., of New Castle, Ind. Estimated cost, $5,000.

*GARBAGE FURNACE.—Monessen, Pa.—Bids are asked by C. B. Parkinson, Boro. Engr., Monessen, until noon, July 28, for construction and maintenance of a garbage furnace. Dr. W. D. Hunter is Chn. of Sanitary Com.

DITCH.—Crookston, Minn.—Bids were received by H. J. Welte, County Audr., on July 8 for digging and constructing county ditch No. 72. Contract was awarded to CASTLE BROS., Crookston, at 10.49 cts. per cu. yd.

FENCES.—Fort Myer, Va.—Bids are asked until 11 a. m., Aug. 4, by Capt. W. W. Whiteside, Constr. Q. M., (a) for the construction of corral fences for two artillery stables; (b) for the construction of corral fence for one veterinary stable.

CEMENT, SAND, ETC.—New York, N. Y.—Bids will be received by the Department of Parks until 3 p. m., July 29, for furnishing and delivering Portland cement, building sand and broken stone for use in the conservatory lake in Central Park.

FENCING.—New York, N. Y.—Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., Aug. 4, for fencing vacant lots on the west side of Ashford

St., between Belmont and Sutter Aves., and various other streets in the Boro. of Brooklyn.

*DIKES, REVETMENT.—Kansas City, Mo. —Bids are asked until noon, Aug. 16, by Maj. Edward H. Schultz, Corps Engrs., for construction of about 8,260 ft. of pile dikes and 4,000 ft. of revetment, on the Missouri River, between river mouth and Kansas City.

REVETMENT, DREDGING.—National Soldiers' Home, Va.—Bids are asked by J. T. Hume, Treas., Southern Branch, N. H. D. V. S., National Soldiers' Home, Va., until 1.30 p. m., July 29, for dredging about 8,000 cu. yds. in Jones' Creek, and repairs to revetment.

WIRE FENCE.—New York, N. Y.—Bids are asked by the Department of Parks until 3 p. m., July 29, for furnishing all the labor and materials for erecting an electrically welded wire fence, with reinforced-concrete and wood posts, easterly extension of Bronx Park.

TRACK.—Norfolk, Va.—Bids are asked by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., Aug. 7, for constructing a track for a 40-ton crane at Norfolk Navy Yard. Specifications are on file at office of Engineering News, New York.

IRON RAILINGS.—New York, N. Y.—Bids were received by the Department of Parks on July 8 for furnishing and erecting iron railings around the grass plots in Broadway, between 82d and 92d Sts. Contract was awarded to CLARKE & STOWE, Greenpoint Ave., Brooklyn, at $14,900.

DITCHES.—St. Paul, Minn.—Bids will be received until 2 p. m., July 30, at the office of S. G. Iverson, State Audr., for constructing ditches in several counties, containing 2,388,205 cu. yds. Ditches can be constructed with floating dredge. Geo. A. Ralph is State Drainage Engr., St. Paul.

BARGE CANAL.—Albany, N. Y.—Bids were received on July 13 by F. C. Stevens, Supt. Public Works, for the construction of canal works on the following contracts: No. 20-A; No. 20-B; No. 20-C.; No. 20-D. Also on Contract No. 23. Itemized prices, etc., are given in this issue under Contract Prices.

DITCHES.—Orlando, Fla.—Bids were received by B. M. Robinson, Clk. Bd. of Comrs., on July 15 (an extension of time from June 7) for constructing various ditches. Wilbur A. Ginn, Engr., First National Bank Bldg., Sanford, Fla. Contract has been let to JOHN E. PACE, of Sanford, at $58,562.

WHARF.—New Orleans, La.—Bids were received on July 13 by Board of Commissioners of the Port of New Orleans for constructing Poydras St. wharf, materials to be furnished by the Board. A. C. Bell, Engr., 606 Hibernia Bank & Trust Co. Bldg. Contract was awarded to CHAS. R. CORBETT, of New Orleans. Estimated cost, $96,000.

DAMS.—Port Arthur, Ont.—Bids were received on July 12 by J. O. Reaume, Minister Public Works, of Ontario, at Toronto, for constructing concrete storage and regulating dams at the outlet of Great Dog Lake, in Thunder Bay District, near Port Arthur. Contract was awarded to WM. WHITE, Burlington, Ont. Estimated cost, $40,000.

DREDGING.—Wilmington, Del.—Bids were received on July 2 by Capt. L. H. Rand, Corps Engrs., U. S. A., for dredging, and the RIVER & HARBOR IMPROVEMENT CO., of Philadelphia, Pa., has secured contract as follows: Smyrna River, 17 cts. per cu. yd.; St. Jones River, 13.9 cts. per cu. yd.; and Murderkill River, 12.9 cts. per cu. yd.

DITCHES.—Hampton, Iowa.—F. G. Luke, County Audr., will receive new bids until Aug. 3 for construction of open ditches in Drainage Dist. No. 6. Total excavation, about 373,000 cu. yds. Bids will be received at same time for tile for Drainage Dist. No. 7; estimated cost, $9,500. All bids opened June 25 and July 9 for this work were rejected, being too high.

CRANE.—Norfolk, Va.—The following are the bids received on July 10 at the office of the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for a locomotive jib crane of 40 gross tons capacity for the Navy Yard, Norfolk (specification 1637): Interstate Engineering Co., Bedford, Ohio, $44,973, and Browning Engineering Co., Cleveland, Ohio, $42,976.

DREDGE BOAT MACHINERY.—Columbus, Ohio.—Bids will be received by the State Board of Public Works until noon, July 29, for furnishing machinery complete for one dredge boat and installing same on the Miami and Erie Canal at Hamilton, Ohio; machinery and workmanship to be a substantial duplication of dredge installed on the Ohio Canal at Akron by the board in 1908.

HARBOR WORK.—North Chicago, Ill.—Bids were received as follows on July 20, by the Chief of the Bureau of Navigation, Navy Dept., Washington, D. C., for the construction of harbor-entrance piers at the Naval Training Station, Great Lakes, North Chicago, Ill. Bids were received (a) with and (b) without the steel landing float and brow, and (c) on amended plans submitted by the Bureau. Great Lakes Dredging & Dock Co., 138 Washington St., Chicago, (a) $111,200, (b) $109,700, (c) $105,000; P. W. Galloway, Racine, Wis., (a) and (b) no bid, (c) $105,839, $101,839; Standard Construction Co., 164 Dearborn St., Chicago, (a) $96,600, (b) $95,400, (c) $94,000.

BOILERS, STEEL STACK.—Washington, D. C.—The following are the bids opened July 10 at the office of the Bureau of Yards and Docks, Navy Dept., for eight boilers, with superheaters and oil burners, connecting flues, and one self-supporting steel stack at the Navy Yard at Puget Sound and Mare Island (specification 1634): Heine Safety Boiler Co., 421 Olive St., St. Louis, Mo., $106,000; Edge Moor Iron Co., Edge Moor, Del., $99,000; Wickes Boiler Co., 90 West St., New York, N. Y., $21,500 (bidder's plans with certain modifications); E. Keeler Co., West St., Williamsport, Pa., $110,198; Babcock & Wilcox Co., 1008 North American Bldg., Philadelphia, Pa., $102,841; Hallidie Machinery Co., 122 King St., Seattle, Wash., $30,470 (bidder's plans with certain modifications).

AIR COMPRESSORS.—Washington, D. C.—Bids were received as follows by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., on July 10 (postponement from June 26), for furnishing and installing three 5,000 cu. ft. air compressors and accessories at the navy yards at New York, Philadelphia and Mare Island, Cal.: (Each bid contained certain modification): Hooven-Owens, Rentschler Co., Hamilton, Ohio, $76,719; Wisconsin Engine Co., Corliss, Wis., $28,137 (bidder's plans with certain modifications); Providence Engineering Works, 521 S. Main St., Providence, R. I., $82,500; Nordberg Mfg. Co., Milwaukee, Wis., $78,840; Ingersoll-Rand Co., 11 Broadway, New York, N. Y., $73,332; Allis-Chalmers Co., Milwaukee, Wis., $69,975 (omitting condensing equipment for Philadelphia air compressor); Laidlaw-Dunn-Gordon Co., 11 Broadway, New York, N. Y., $69,850; Sullivan Machinery Co., 1506 Railway Exchange Bldg., Chicago, Ill., $113,162.

CONTRACT PRICES.

(denotes that this work is advertised in Engineering News.)*

*JETTY.—Galveston, Tex.—Bids were received by Capt. John C. Oakes, Corps Engrs., U. S. A., on June 10, for jetty work at Aransas Pass, Tex. Bids in detail were as follows—(A) Chas. Clarke & Co., Galveston; (B) D. M. Picton, Galveston:

South jetty, Gulf extension—	(A)	(B)
82,500 tons riprap placed in work	$3.40	$3.08
18,500 tons crest-stone placed in work	3.60	4.09
2,700 lin. ft, creosoted pile railway trestle and track complete	4.80	7.50
North jetty, repairs—		
15,000 tons riprap alongside the jetty	3.15	2.81
1,000 tons cap-block alongside the jetty	3.58	3.93
South jetty, across island—		
5,700 tons riprap placed in work	3.20	2.70
1,700 lin. ft. uncreosoted pile trestle and track	3.75	4.30
Total	$435,505	$418,795

BARGE CANAL.—Albany, N. Y.—Bids and itemized prices of the bids received on July 13 by F. C. Stevens, Supt. Public Works, for Barge Canal Contract No. 23, are as follows. The contract is for the construction of the canal, land line, from Kings Bend to the Genesee River, a distance of 5.63 miles—(A) Engineer's estimate; (B) F. J. McKain Construction Co., Mercer, Pa.; (C) John Marsch, Borland Bldg., Chicago, Ill.; (D) Buffalo Dredging Co., Buffalo; (E) Scott, Smith & White, St. Louis, Mo.; (F) S. H. McGuigan, Buffalo; (G) American Pipe & Construction Co., 112 North Broad St., Philadelphia; (H) Millard & Lupton Co., Allegheny Ave. and Tulip St., Philadelphia; (I) Scott Bros., Baldwinsville, N. Y.; (J) Booth & Flynn, Ltd., and Dravo Contracting Co., Pittsburg; (K) Reinhart & Dennis Co. and Faulkener, Washington, D. C.; (L) S. Pearson & Son, Inc., Long Island City, N. Y.; (M) M. A. Talbot & Co., Baltimore, Md.; (N) Carter Construction Co., Chicago, Ill.; (O) H. F. Kerbaugh, Inc., Arcade Bldg., Philadelphia; (P) MacArthur Bros. Co., 11 Pine St., New York:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Cofferdams, pumping, bailing & draining (lump sum)	$7,500.00	$7,500.00	$7,500.00	$8,000.00	$9,000.00	$7,500.00	$9,000.00	$9,000.00
Clearing (lump sum)	500.00	500.00	500.00	500.00	600.00	500.00	600.00	600.00
35,200 cu. yds. grubbing	.30	.30	.30	.30	.30	.25	.36	.35
2,928,000 cu. yds. excavation	.30	.27	.27	.29	.28	.295	.25	.28
3,000 lin ft. round timber bracing	.20	.20	.20	.22	.20	.20	.24	.20
300 M. ft. B. M. sheeting & bracing, per M. ft.	50.00	50.00	50.00	38.50	55.00	50.00	50.00	45.00
1,095,000 cu yds. forming embankment	.12	.08	.10	.12	.10	.105	.14	.04
4,530 cu. yds. lining	1.50	1.50	1.80	1.50	1.55	1.50	1.00	1.50
33 M. ft. B. M. sawed lumber (yellow pine or Douglas fir), per M. ft.	60.00	60.00	60.00	60.00	60.00	60.00	50.00	55.00
16 M. ft. B. M. white oak lumber in miter sills and gates, per M. ft.	100.00	100.00	100.00	100.00	100.00	100.00	90.00	100.00
13 M. ft. B. M. sawed lumber in needles, per M. ft.	75.00	75.00	80.00	75.00	75.00	75.00	75.00	75.00
323,900 lin. ft. foundation piles	.35	.25	.32	.27	.40	.33	.42	.32
242 M. ft. B. M. wooden sheet piling, per M. ft.	50.00	50.00	55.00	38.50	55.00	50.00	60.00	45.00
4,500 sq. ft. steel sheet piling	1.50	1.50	1.50	1.50	1.50	1.50	1.75	1.50
77,600 cu. yds. second-class concrete	7.50	6.50	7.05	6.50	7.15	6.35	8.00	6.40
770 cu. yds. second-class reinforced concrete	12.00	12.00	11.40	12.40	10.00	12.00	14.00	10.00
14 cu. yds. first-class masonry coping	30.00	30.00	32.0	33.30	30.00	30.00	20.00	35.00
39,400 cu. yds. dry retaining wall	2.75	2.75	3.30	3.00	3.00	2.95	2.75	2.50
38,200 cu. yds. wash wall	2.25	2.25	2.55	2.45	2.50	2.50	1.50	2.00
280 sq. yds. second-class stone paving	1.75	1.75	2.20	2.00	1.80	1.75	1.75	2.00
3,380 sq. yds. third-class stone paving	1.50	1.50	1.80	1.65	1.60	1.50	1.50	1.75
200 cu. yds. first-class riprap	3.00	3.00	3.50	3.00	3.50	2.75	3.00	3.00
860 cu. yds. second-class riprap	2.75	2.75	3.75	2.75	3.20	2.75	2.75	2.75
770 cu. yds. third-class riprap	2.50	2.50	3.00	2.10	2.70	2.50	2.50	2.50
5,200 cu. yds. fourth-class riprap	2.25	2.25	2.30	2.25	2.60	2.35	2.25	2.00
1,100 cu. yds. grouted riprap	5.00	5.00	5.50	5.00	5.50	5.00	6.00	4.00
43,600 lbs. cast-iron pipe and specials	.03½	.035	.0325	.035	.035	.03	.03	.03
920,000 lbs. structural steel	.04½	.045	.049	.049	.04	.0425	.04	.04
298,400 lbs. metal reinforcement	.03½	.035	.035	.035	.035	.035	.03	.03
97,800 lbs. iron castings, plain	.03½	.035	.035	.035	.035	.035	.035	.03
38,080 lbs. iron castings, machined	.05	.05	.0475	.055	.05	.05	.05	.05
425,000 lbs. metal in guard lock gates	.05½	.055	.054	.06	.055	.05	.05	.05
170,000 lbs. metal in buffer beams	.05½	.055	.054	.06	.055	.0475	.05	.05
525,600 lbs. metal in lock gates	.05½	.055	.054	.06	.055	.0425	.05	.05
140,000 lbs. metal in lock valves & by-pass valves	.09	.09	.105	.095	.09	.09	.10	.09
17,400 cu. ft. brick lining	.80	.80	.70	.80	.85	.80	.80	.60
2,300 sq. yds. wood pavement, 2¾ ins. thick	2.75	2.75	2.75	2.25	3.75	2.75	2.75	2.50
11,800 lin. ft. wooden fence	.20	.20	.30	.30	.22	.20	.20	.20
230 lin. ft. wrought-iron pipe railing	1.00	1.00	1.00	1.00	1.00	1.00	1.20	1.00
1,100 lin. ft. lattice railing	1.50	1.50	1.50	1.50	1.70	1.50	1.50	1.50
3 storehouses (each)	800.00	800.00	800.00	880.00	800.00	775.00	960.00	800.00
3 office buildings (each)	250.00	250.00	250.00	275.00	250.00	245.00	300.00	250.00
2 gate hoists (each)	650.00	650.00	650.00	650.00	650.00	655.00	650.00	650.00
2 gate hoists (each)	850.00	850.00	850.00	850.00	850.00	855.00	850.00	850.00
Maintaining highway traffic (lump sum)	2,000.00	2,000.00	2,000.00	2,000.00	2,200.00	1,850.00	2,400.00	2,000.00
Deduct price to be paid to the State of New York for buildings in place which are to be removed by the contractor without expense to the State (lump sum)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total	$2,166,600	$1,924,970	$2,055,672	$2,056,732	$2,009,010	$2,043,249	$2,072,608	$1,887,036

	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
Cofferdams, pumping, bailing & draining (lump sum)	$7,500.00	$7,500.00	$7,500.00	$8,250.00	$7,500.00	$7,500.00	$7,500.00	$9,000.00
Clearing (lump sum)	500.00	500.00	500.00	550.00	500.00	500.00	500.00	500.00
35,200 cu. yds. grubbing	.30	.30	.30	.33	.30	.30	.30	.39
2,928,000 cu. yds. excavation	.265	.30	.26	.32	.26	.275	.24	.29
3,000 lin ft. round timber bracing	.20	.20	.20	.22	.20	.20	.20	.20
300 M. ft. B. M. sheeting & bracing, per M. ft.	40.00	50.00	50.00	55.00	50.00	53.00	50.00	40.00
1,095,000 cu yds. forming embankment	.08	.12	.12	.12	.11	.12	.12	.10
4,530 cu. yds. lining	1.50	1.50	1.50	1.55	1.50	1.50	1.50	1.50
33 M. ft. B. M. sawed lumber (yellow pine or Douglas fir), per M. ft.	55.00	60.00	60.00	66.00	60.00	60.00	60.00	50.00
16 M. ft. B. M. white oak lumber in miter sills and gates, per M. ft.	100.00	100.00	100.00	110.00	100.00	100.00	100.00	75.00
13 M. ft. B. M. sawed lumber in needles, per M. ft.	75.00	75.00	75.00	82.20	75.00	75.00	75.00	70.00
323,900 lin. ft. foundation piles	.32	.35	.35	.38	.30	.30	.35	.27
242 M. ft. B. M. wooden sheet piling, per M. ft.	48.00	50.00	50.00	65.00	50.00	50.00	50.00	45.00
4,500 sq. ft. steel sheet piling	1.50	1.50	1.50	1.65	1.50	1.50	1.50	1.25
77,600 cu. yds. second-class concrete	6.50	7.75	6.00	8.00	6.60	6.00	6.50	6.50
770 cu. yds. second-class reinforced concrete	12.00	12.00	12.00	13.20	12.00	12.00	12.00	10.00
14 cu. yds. first-class masonry coping	36.00	30.00	30.00	33.00	30.00	30.00	30.00	30.00
39,400 cu. yds. dry retaining wall	3.00	2.75	2.50	3.055	2.75	1.25	2.75	3.30
38,200 cu. yds. wash wall	2.35	2.25	2.25	2.47	2.25	2.25	2.25	2.50
280 sq. yds. second-class stone paving	2.00	1.75	1.75	1.92	1.75	1.75	1.75	2.00
3,380 sq. yds. third-class stone paving	1.75	1.50	1.50	1.65	1.50	1.50	1.50	1.75
200 cu. yds. first-class riprap	3.00	3.00	3.00	3.30	3.00	3.00	3.00	3.60
860 cu. yds. second-class riprap	2.75	2.75	2.75	3.02	2.75	2.75	2.75	3.00
770 cu. yds. third-class riprap	2.50	2.50	2.50	2.75	2.50	2.50	2.50	3.00
5,200 cu. yds. fourth-class riprap	2.35	2.25	2.75	2.47	2.25	2.25	2.25	2.70
1,100 cu. yds. grouted riprap	5.00	5.00	5.00	5.50	5.00	5.00	5.00	5.00
43,600 lbs. cast-iron pipe and specials	.035	.035	.035	.04	.035	.035	.035	.035
920,000 lbs. structural steel	.0425	.045	.045	.05	.045	.045	.045	.045
298,400 lbs. metal reinforcement	.035	.035	.035	.04	.035	.035	.035	.035
97,800 lbs. iron castings, plain	.035	.035	.035	.04	.035	.035	.035	.035
38,080 lbs. iron castings, machined	.05	.05	.05	.055	.05	.05	.05	.05
425,000 lbs. metal in guard lock gates	.055	.05	.055	.06	.055	.055	.055	.055
170,000 lbs. metal in buffer beams	.055	.055	.055	.06	.055	.055	.055	.055
525,600 lbs. metal in lock gates	.055	.055	.055	.06	.055	.055	.055	.055
140,000 lbs. metal in lock valves & by-pass valves	.09	.09	.09	.10	.09	.09	.09	.09
17,400 cu. ft. brick lining	.80	.80	.80	.88	.80	.80	.80	.80
2,300 sq. yds. wood pavement, 2¾ ins. thick	2.75	2.75	2.75	3.02	2.75	2.75	2.75	2.75
11,800 lin. ft. wooden fence	.20	.20	.20	.22	.20	.20	.20	.20
230 lin. ft. wrought-iron pipe railing	1.00	1.00	1.00	1.10	1.00	1.00	1.00	1.00
1,100 lin. ft. lattice railing	1.75	1.50	1.50	1.65	1.50	1.50	1.50	1.50
3 storehouses (each)	800.00	800.00	800.00	880.00	800.00	800.00	800.00	800.00
3 office buildings (each)	250.00	250.00	250.00	275.00	250.00	250.00	250.00	250.00
2 gate hoists (each)	650.00	650.00	650.00	715.00	650.00	650.00	650.00	650.00
2 gate hoists (each)	850.00	850.00	850.00	935.00	850.00	850.00	850.00	850.00
Maintaining highway traffic (lump sum)	2,000.00	2,000.00	2,000.00	2,200.00	2,000.00	2,000.00	2,000.00	2,000.00
Deduct price to be paid to the State of New York for buildings in place which are to be removed by the contractor without expense to the State (lump sum)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total	$1,942,518	$2,147,200	$1,923,230	$2,321,478	$1,952,495	$1,901,705	$1,913,220	$2,040,581

BARGE CANAL.—Albany, N. Y.—Itemized prices of the bids received on July 13 by F. C. Stevens, Supt. Public Works, Albany, for Barge Canal Contract No. 20-A (which is for the construction of the canal, river and land line, between Little Falls and Mindenville, a distance of 4.5 miles) were—(A) Engineer's estimate; (B) Houston Barnard, Powers Bldg., Rochester, N. Y.; (C) Acme Engineering & Contracting Co., Schenectady, N. Y.:

	(A)	(B)	(C)
Clearing (lump sum)	$100.00	$120.00	$100.00
500 cu. yds. grubbing	.40	.45	.45
588,000 cu. yds. excavation	.82	.80	1.15
4 M. ft. B. M. sheeting and bracing. (Per M. ft.)	50.00	60.00	55.00
250 lin. ft. round timber bracing	.06	.07	.07
7,500 cu. yds. forming embankment	.15	.18	.18
100 cu. yds. lining	1.50	1.80	1.60
6,000 cu. yds. wash wall	2.00	2.40	2.40
100 cu. yds. first-class riprap	3.00	3.60	3.50
200 cu. yds. second-class riprap	3.00	3.60	3.50
300 cu. yds. third-class riprap	3.00	3.60	3.50
500 cu. yds. fourth-class riprap	2.50	3.00	3.00
Total	$499,000	$490,592	$696,272

BARGE CANAL.—Albany, N. Y.—Itemized prices of the bids received on July 13 by F. C. Stevens, Supt. Public Works, Albany, for Barge Canal Contract No. 20-B (which is for dredging a channel in the Mohawk River and performing work incidental thereto betwen Mindenville and Canajoharie, a distance of 10.1 miles) were as follows—(A) Engineer's estimate; (B) S. Pearson & Son, Inc., Long Island City, N. Y.; (C) American Pipe & Construction Co., 112 North Broad St., Philadelphia, Pa.:

	(A)	(B)	(C)
Clearing (lump sum)	$150.00	$165.00	$180.00
1,250 cu. yds. grubbing	.40	.44	.48
1,428,000 cu. yds. excavation	.58	.638	.79
4 M. ft. B. M. sheeting and bracing. (Per M. ft.)	50.00	55.00	60.00
250 lin. ft. round timber bracing	.06	.066	.072
16,300 cu. yds. forming embankment	.15	.165	.18
360 cu. yds. lining	1.50	1.65	1.80
1,200 cu. yds. wash wall	2.00	2.20	2.40
1,600 sq. yds. first-class stone paving	3.00	3.30	3.00
550 cu. yds. first-class riprap	3.00	3.30	3.60
600 cu. yds. second-class riprap	3.00	3.30	3.60
600 cu. yds. third-class riprap	3.00	3.30	3.60
1,600 cu. yds fourth-class riprap	2.50	2.625	3.00
Total	$848,540	$933,194	$1,151,520

BARGE CANAL.—Albany, N. Y.—Itemized prices of the bids received on July 13 by F. C. Stevens, Supt. Public Works, Albany, for Barge Canal Contract No. 20-C (which is for dredging a channel in the Mohawk River and performing work incidental thereto between Canajoharie and Yosts, a distance of 7.9 miles) were as follows—(A) Engineer's estimate; (B) American Pipe & Construction Co., Philadelphia; (C) S. Pearson & Son, Inc., Long Island City, N. Y.; (D) Acme Engineering & Contracting Co., Schenectady, N. Y.:

	(A)	(B)	(C)	(D)
Clearing (lump sum)	$150.00	$180.00	$165.00	$150.00
100 cu. yds. grubbing	.40	.48	.44	.45
1,100,000 cu. yds. excavation	.50	.51	.535	.54
4 M. ft. B. M. sheeting and bracing (Per M. ft.)	50.00	60.00	65.00	60.00
250 lin. ft. round timber bracing	.06	.072	.066	.07
500 cu. yds. forming embankment	.15	.18	.165	.18
480 cu. yds. lining	1.50	1.80	1.65	1.60
2,500 sq. yds. first-class stone paving	3.00	3.60	3.30	3.00
700 cu. yds. first-class riprap	3.00	3.60	3.30	3.50
700 cu. yds. second-class riprap	3.00	3.60	3.30	3.50
400 cu. yds. third-class riprap	3.00	3.60	3.30	3.50
2,600 cu. yds. fourth-class riprap	2.50	3.00	2.75	2.75
Total	$570,600	$585,720	$611,160	$616,220

BARGE CANAL.—Albany, N. Y.—Itemized prices of the bids received on July 13 by F. C. Stevens, Supt. Public Works, Albany, for Barge Canal Contract No. 20-D (which is for dredging a channel in the Mohawk River and performing work incidental thereto between Yosts and Rexford Flats, a distance of 36.2 miles) were as follows—(A) Engineer's estimate; (B) Empire Engineering Corporation, 60 Wall St., New York; (C) American Pipe & Construction Co., Philadelphia, Pa.:

	(A)	(B)	(C)
Clearing (lump sum)	$600.00	$600.00	$720.00
195 cu. yds. grubbing	.40	.40	.40
5,144,000 cu. yds. excavation	.43	.58	.51
8 M. ft. B. M. sheeting and bracing. (Per M. ft.)	50.00	50.00	50.00
450 lin. ft. round timber bracing	.06	.06	.072
1,000 cu. yds. forming embankment	.15	.15	.18
650 cu. yds. lining	1.50	1.50	1.80
400 cu. yds. second-class concrete	10.00	10.00	12.00
3,600 sq. yds. first-class stone paving	3.00	3.25	3.60
2,000 cu. yds. first-class riprap	3.00	3.60	3.60
2,150 cu. yds. second-class riprap	3.00	3.35	3.60
1,200 cu. yds. third-class riprap	3.00	2.80	3.60
6,000 cu. yds. fourth-class riprap	2.50	2.50	3.00
Total	$2,260,000	$3,033,997	$2,661,040

*ABUTMENT, PIERS, ETC.—Wheeling, W. Va.—Bids were received on June 16 by Capt. F. W. Alstaetter, Corps Engrs., U. S. A., Wheeling, for abutment, piers and weirs for Dam No. 8, Ohio River. The bidders and itemized bids were as follows: (A) The H. E. Talbott Co., Dayton, Ohio; (B) the Ohio River Contract Co., Evansville, Ind.; (C) the Hollerbach & May Contract Co., Evansville; (D) the T. A. Gillespie Co., Pittsburg:

	(A)	(B)	(C)	(D)
24,000 cu. yds. common excavation	$1.20	$1.40	$0.70	$1.20
300 cu. yds. rock excavation	2.00	2.00	4.00	2.00
2,500 cu. yds. fill	1.20	.75	.75	.90
8,000 cu. yds. riprap	4.00	3.00	3.00	4.20
17,000 lin. ft. round piles	.70	.60	.50	.70
125,000 ft. B. M. sheet piles, per M	80.00	100.00	80.00	105.00
18,000 ft. B. M. sheeting, 4-inch, per M	80.00	60.00	60.00	105.00
181,000 ft. B. M. common timber, per M	90.00	67.50	67.50	90.00
88,000 ft. B. M. deck timber, per M	110.00	67.50	67.50	100.00
63,000 ft. B. M. oak timber, per M	100.00	100.00	90.00	120.00
35,000 ft. B. M. yellow pine timber, per M	100.00	100.00	90.00	120.00
11,000 cu. yds. concrete	8.50	5.00	7.00	8.60
760,000 lbs. structural steel	.07	.07	.05	.08
29,000 lbs. reinforcing rods	.05	.04	.05	.06
111,000 lbs. forgings	.07	.07	.05	.06
66,000 lbs. bolts, etc.	.07	.06	.05	.07
87,000 lbs. iron castings	.07	.07	.05	.07
119,000 lbs. steel castings	.07	.07	.05	.08
1,100 lbs. bronze	.40	.85	.50	1.00
1,800 lin. ft. pipe, 3-inch	1.00	1.00	1.00	1.00
1,100 lin. ft. pipe, 1½-inch	1.00	.75	1.00	1.00
4 flanged tees, 3-inch	5.00	7.50	7.50	5.00
20 flanged long-radius elbows, 3-inch	5.00	7.50	5.00	6.00
32 companion flanges, 3-inch	5.00	1.50	2.00	6.00
8 companion flanges, 1½-inch	4.00	1.00	1.00	2.00
6 globe valves, 3-inch	15.00	20.00	15.00	20.00
6 cocks, 2-inch	6.00	7.50	5.00	6.00
6 expansion joints, 3-inch	25.00	7.50	10.00	8.00
3 drip pockets	40.00	7.50	30.00	30.00
Total	$302,518	$251,351	$229,954	$317,887

U. S. POSSESSIONS.

PASSENGER COACHES.—Panama.—Bids are asked by the Panama R. R. Co., 24 State St., New York, until 2 p. m., July 26, for furnishing six passenger coaches (circular P-232).

PILES, STRINGERS, ETC.—Panama.—Bids will be received until 2 p. m., July 26, by the Panama R. R. Co., 24 State St., New York, for furnishing piles, stringers, braces, etc. (Circular P-231).

LUMBER.—Panama.—The Isthmian Canal Commission has awarded contract for furnishing 800,000 ft. B. M. of Douglas fir ceiling, siding and flooring at $17,560, and 1,208,000 ft. B. M., of Douglas fir lumber at $24,039, to the CHARLES NELSON CO., San Francisco, Cal. Delivery at Balboa, Canal Zone, in 29 days.

*STEEL BARS, CEMENT.—Porto Rico.—Bids were received by Executive Council of Porto Rico, at San Juan, on June 26, for about 200,000 lbs. of steel bars for concrete reinforcement. Lowest bidder was the Crucible Steel Co., Frick Bldg., Pittsburg, at $3,253.

Bids were received at same time for furnishing and delivering two lots of 1,500 and 6,500 barrels, respectively, of Portland cement, for use on the Porto Rico Irrigation Service. B. M. Hall, Ch. Engr., Porto Rico Irrigation Service. The lowest bidders were Fritze Lundt & Co., San Juan, P. R., at $14,560 for "Alpha" brand, delivered at Arroyo, P. R., warehouse.

ENGINEERING SUPPLIES.—Panama.—Bids were received as follows by the Isthmian Canal Commission, Washington, on July 19, for furnishing (a) steel culvert forms, and (b) 9,000 gallons boiler compound: Liberty Compound Co., 90 West St., New York, (b) $18,900, $18,000, 20 days; George W. Lord Co., 2238 North Ninth St., Philadelphia, (b) $6,300; North American Chemical & Engineering Co., 23 Old Slip, New York, (b) $18,000; Atlas Preservative Co., of America, New York, (b) $10,440; Beltine Chemical & Mfg. Co., Chicago, (b) $9,000; Bird-Archer Co., New York, (b) $21,600; Blaw Collapsible Steel Centering Co., Pittsburg, (a) $43,230; A. W. Crouch, Pittsburg, $9,000; H. W. Johns-Manvill Co., 100 William St., New York, $13,500; George W. Jackson, Inc., Chicago, (a) $28,173; Lake Erie Boiler Compound Co., Buffalo, (b) $16,200; United States Cement Machinery Mfg. Co., Plain City, Ohio, (a) $38,642; Baltimore Bridge Co., (a) $47,182.

PUMPING PLANT.—Panama.—Bids were received as follows on July 19, by the Isthmian Canal Commission for furnishing machinery for a central pumping station and three pumping units for hydraulic excavation and sluicing, including pumps and motors, engines, boilers, monitors, pipes and fittings: De Laval Steam Turbine Co., Trenton, N. J., five centrifugal pumps, $18,125; alternative under "B," $80,000; 125 to 183 days. D'Olier Engineering Co., 121 South Eleventh St., Philadelphia, total, $270,685; four pumps, $52,300; four engines, $65,140; six boilers, $39,600; 3,600 ft. discharge pipe, $24,400; three motors for dredging pumps, $25,320; 4,800 lin. ft. for branch line for supplying monitors, $14,400; two relay pumps and motors, $22,100; alternative "A," reciprocating steam pumps, $121,000; total, $274,660; alternative "B," $269,965, 180 and 340 days. Manning, Maxwell & Moore, 85 Liberty St., New York, total, $263,352; four pumps, $20,932; discharge pipe, $28,205; boilers, $37,440; engines, $56,777; motors, $20,712; dredging pumps, $16,782; branch line, $10,176; relay pumps and motors, $34,086; alternative "B," $238,042. Henry R. Worthington, 115 Broadway, New York, (bid not on Government specifications, but on five propositions submitted by bidder), $144,395, $156,360, $146,869, $133,176, $124,134.

LOCK MATERIAL.—Panama.—The General Purchasing Officer of the Isthmian Canal Commission, Washington, has awarded contract for furnishing castings and structural steel for locks at Panama, under, Circular 513, as follows: UNITED ENGINEERING & FOUNDRY CO., Farmers' Bank Bldg., Pittsburg, castings and structural material to be embedded in masonry for all mitering lock gates, reinforcement for sill on the masonry, foundation castings at bottom of hollow quoin, anchorages, including all castings, structural work, eyebars, pins, bolts and forgings, reaction bearings in masonry along hollow quoin, in all about 13,953,950 lbs. of structural steel, $528,124.70; anchor bolts, snubbing hooks, anchor bars, fitted bolts, cast-iron washers, wicket girder seats and guides, cut waters, plate-girders and reaction castings and anchorages, $46,683.57 ROSEDALE FOUNDRY & MACHINE WORKS, Pittsburg, Pa., 40 cylindrical valves, $82,200. CHAPMAN VALVE MFG. CO., Indian Orchard, Mass., 12 gate valves, etc., $9,516. PENN BRIDGE CO., Bond Bldg., Washington, 3,752 copper ladder rungs, $2,058.

Also for valves for controlling the main culverts of the Canal Locks, including structural material, castings, bolts, washers, rubber, comprised under Circular 515, to the PENN BRIDGE CO., Bond Bldg., Washington, at $24,527, for two sets rising stem gates complete, two roller trains, complete, with the necessary structural material, etc.

INDUSTRIAL NOTES.

THE MOSHER WATER TUBE BOILER CO., 50 Church St., New York City, has sent its Vice-President, Mr. A. E. Aeby, to the Pacific coast, for the purpose of establishing agencies throughout that territory.

THE BLACKMER & POST PIPE CO., of St. Louis, Mo., advise that they are now making 42-in. vitrified sewer pipe in commercial quantities. The company claims to be the only concern in the U. S. capable of putting out this size.

THE RAYMOND CONCRETE PILE CO., of New York and Chicago, through its Schenectady representative, B. W. Van Vranken, has secured the contract for the placing of 675 Raymond concrete piles in the foundations of the Schenectady County Court House, Schenectady, N. Y. W. L. Stoddart, New York, is the architect of the building.

THE ELECTRIC FIREPROOFING CO., 19th St. and East River, New York, received the contract for the fireproofing of all wood used for trim throughout the new Emigrant's Savings Bank Building on Chambers St., New York, now in course of construction, as well as the contract for the fireproofing of all the lumber required for the Stock Ticker Bldg., on Beaver St., New York.

THE AMERICAN CHEMICAL ENGINEERING CO., of Indianapolis, Ind., desires to announce its incorporation for the purpose of the performance of more scientific and economic work in the field of engineering chemistry. The officers and directors are Henry H. Buckman, Jr., Pres.; Mark H. Miller, Secy.-Treas.; Irvin C. De Haven, Roland Lord O'Brian, Howard M. Rogers.

AT THE JULY DIRECTORS' MEETING of the Crocker-Wheeler Company, Manufacturers and Electrical Engineers, Ampere, N. J., held at the New York office of the company, while Dr. Schuyler Skaats Wheeler continues in office as President, the following officers were elected for the ensuing year: Vice-President, Gana Dunn; 2d Vice-President, A. L. Doremus; Chief Engineer, Gano Dunn; Secretary, Rodman Gilder; Treasurer, W. L. Brownell; Asst. Treasurer, G. W. Bower.

THE CONDITION of improvement which the Westinghouse companies find their business has undergone, during the past month, maintains the same steady rate of advance already noted during the previous months of the present year, assuring before the close of 1909, a repetition of the busy times of 1907. The Westinghouse Air Brake Co., Wilmerding, Pa., has received a large number of orders for brake apparatus and friction draft gear. As an index of the improved conditions at the Union Switch & Signal Co., Swissvale, Pa., this plant is now employing about twice the number of men of a year ago. In June, the Westinghouse Electric & Manufacturing Co., East Pittsburg, Pa., enjoyed an improvement of 25 per cent. over its business of May. Switchboards and auxiliary supplies, amounting approximately to $500,000 have also been ordered by the Pennsylvania Tunnel & Terminal Co., for the New York terminals and tunnels of the Pennsylvania Railroad. In line with the encouraging improvement noted by the Westinghouse Machine Co., the Philadelphia Rapid Transit Co. has recently placed orders for two steam-turbine equipments, of 6,000 and 12,000-KW. capacity, respectively.

THE UNITED ENGINEERING & CONSTRUCTION CO., of Portland, Oregon, has just been awarded the contract for the erection of a six-span steel lift bridge over the Willamette River for the City of Portland. The officers of the company, which was recently organized, are Drake C. O'Reilly, C. H. Lewis and F. A. Rosenkrans, of Portland, Oregon, and A. S. Eldridge, of New York. Mr. Eldridge had direct charge for eight years of the construction of the Buffalo and Cleveland Breakwater on Lake Erie, for Hughes Bros. & Bangs, and for several years has been associated with J. G. White & Co. The firm has associated with them as Consulting Engineers, Mr. Stephen U. Hopkins and Mr. James S. Winters, of New York; Mr. Hopkins was for several years with the Pennsylvania Railroad and for the last eight years has been in charge of construction of some of the important sections of the New York subway. Mr. Winters was for some time connected with Eastern bridge companies, and for the last five years has been in charge of building work for Charles A. Cowen & Co., of New York City. The new company is organized and equipped to do general contracting, building and engineering work.

THE ALLIS-CHALMERS CO., of Milwaukee, Wis., reports that Mr. Edward G. Dewald, heretofore Manager of the water wheel department of the Platt Iron Works Co., Dayton, Ohio, has become identified with the hydraulic turbine department of the Allis-Chalmers Co., as special representative for the Pacific coast, with headquarters at 599 Mission St., San Francisco. Among the shipments of steam turbines to fill recent contracts are machines of 500 to 3,500 KW. for the Brush Electric Light & Power Co., Galveston, Tex.; Oak Park Power Co., Flint, Mich.; Savannah Electric Co., Savannah, Ga.; Florida Mining Co., Mulberry, Fla.; Glenlyon Dye Works, Phillipsdale, R. I.; Willamette Valley Co., Springfield, Ore.; Pacific Mills, Lawrence, Mass.; Oshkosh Gas Light Co., Oshkosh, Wis., and the Cia Electrica y de Ferrocarriles, Chihuahua, Mex.

Orders now in hand comprise units as follows: Western United Gas & Electric Co., Aurora, Ill., 1,000-KW.; Neenah Paper Co., Neenah, Wis., 1,000-KW.; Cleveland Cliffs Iron Mining Co., Ishpeming, Mich., 2,000-KW.; Royal Weaving Co., Pawtucket, R. I., 1,500-KW.; North Adams Gas Light Co., North Adams, Mass., 1,000-KW.; Merchants Heat & Light Co., Indianapolis, Ind., 2,000-KW.; Municipal Light Plant, Anderson, Ind., 500-KW.; Clinton Sugar Refining Co., Clinton, Iowa, 750-KW.; Anderson & Middleton Lumber Co., Aberdeen, Wash., 300-KW.; Kenosha Electric Railway Co., Kenosha, Wis., 300-KW.; Fraser River Lumber Co., Fraser Mills, B. C., 750-KW.; Northwestern Gas & Electric Co., Walla Walla, Wash., 1,000-KW.; Wilkes-Barre Gas & Electric Co., Wilkes-Barre, Pa., 1,500-KW.; Eastern Pennsylvania Rys. Co., Pottsville, Pa., 1,000-KW.; Delaware, Lackawanna & Western Ry., Scranton, Pa., 2,000-KW.; Colorado Springs Electric Co., Colorado Springs, Colo., 1,500-KW.; Aldrich Mfg. Co., Moosup, Conn., 300-KW., and Great Southern Lumber Co., Bogalusa, La., 1,000-KW.

CONTRACT PRICES.

*SURFACING.—Boston, Mass.—Bids were received on June 21 by the Charles River Basin Commission for surfacing Sections 2, 3 and 4 of Boston Embankment, and the lowest bid was submitted by (A) Bruno & Petitti, of Boston, at $48,003. Totals of other bids: (B) Holbrook, Cabot & Rollins Corporation, Boston, $49,421; (C) T. H. Gill Co., Somerville, $49,460; (D) F. A. Wyman, Jr., Boston, $50,722; (E) Jas. Driscoll & Son, Brookline, $51,800; (F) Coleman Bros., Boston, $55,167; (G) H. M. McBride, Brighton, $55,176; (H) W. H. Ellis, East Boston, $61,092; (I) James T. Barrett, Cambridge, $62,996. Hiram Miller is Ch. Engr. The bids in detail were as follows:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
1,300 lin. ft. laying 8-in. vitrified pipe	$0.30	$0.50	$0.30	$0.50	$0.35	$0.40	$0.50	$0.54	$0.50
125 lin. ft. laying 10-in. vitrified pipe	0.30	0.65	0.50	0.63	0.40	0.40	0.57	0.56	0.60
130 lin. ft. laying 12-in. vitrified pipe	0.30	1.00	0.50	0.72	0.50	0.40	0.58	0.75	0.70
5,000 lin. ft. laying 4-in. cast-iron pipe	0.25	0.30	0.28	0.30	0.35	0.20	0.31	0.38	0.50
4,400 lin. ft. laying 2-in. fiber conduits	0.20	0.20	0.16	0.26	0.15	0.10	0.25	0.30	0.30
6 service boxes "G"	10.00	15.00	10.00	5.00	10.00	20.00	5.00	6.85	10.00
26 service boxes "F"	10.00	10.00	9.00	4.50	10.00	20.00	5.00	6.55	10.00
41 catch basins for walks	12.00	20.00	20.00	10.00	15.00	15.00	18.00	25.00	15.00
600 cu. yds. gravel in place in walks	1.50	2.00	1.50	1.45	1.50	1.50	1.50	1.25	1.50
230 sq. yds. vitrified brick gutters	2.00	2.50	2.50	2.35	2.50	2.50	2.20	2.45	2.50
9,600 sq. yds. granolithic walks	1.60	1.60	1.65	1.63	1.60	1.50	1.60	1.68	1.75
20,500 cu. yds. loam surfacing in place	1.35	1.35	1.38	1.44	1.50	1.75	1.65	1.85	1.90
400 sq. yds. sodding	0.50	0.50	0.30	0.30	0.75	0.25	0.60	1.00	0.50

Readers' Wants

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

BRASS GEARS.—Mexico City, Mex.—E. M. Wilkins, 3A Industria 52, writes us to be placed in communication with manufacturers of standard sizes of small brass gears and pinions.

ICE PLANTS.—Huntington, L. I., N. Y.—We are in receipt of a letter from H. H. Hill requesting that we place him in touch with manufacturers of ice plants of 25 to 50 tons capacity.

FILTER.—Clarksburg, W. Va.—W. W. Price, Engr. Clarksburg Brewing Co., advises us that the company is in the market for a water filter of 500 barrels daily capacity.

TRADE PUBLICATIONS.

MANHOLE AND CATCH-BASIN CASTINGS.—T. A. Cummings Foundry Co., 67 Clybourn Place, Chicago. Paper; 2¾ × 5¼ ins.; pp. 16; illustrated.

This is an illustrated list of manhole and catch-basin curbs and covers, gutter boxes, etc. Also the Chicago sleeve and nipple for making connections to water, gas or other mains.

WIRE ROPE TRAMWAY.—A. Leschen & Sons Rope Co., 920-932 North First St., St. Louis, Mo. 10½ × 7½ ins.; pp. 24; illustrated.

This is a series of remarkably fine views of the 8,000-ft. cableway carrier used to transmit men and material to the temporary crib in Lake Michigan, which was the scene last winter of the horrible fire, when so many workmen lost their lives.

WATERPROOFING COMPOUND.—The Diamond Waterproofing Co., 707 Reibold Building, Dayton, Ohio. Paper; 3½ × 6 ins.; pp. 4.

The material is said to be a mineral compound held in suspension in a liquid solution, and applicable to the treatment of wood, brick, stone, concrete, concrete blocks, etc. Prices are given, but it is not stated to what extent the material has been used.

CONCRETE SILOS.—The Concrete Review, March-April, 1909, Vol. 3, No. 2. Bulletin No. 21. Association of American Portland Cement Manufacturers, Philadelphia, Pa. 6 × 9 ins.; pp. 61; illustrated.

This discussion of methods and designs for concrete silos, by Messrs. C. W. Gaylord and P. H. Wilson, is one of the best and most complete that we have seen on this rapidly developing use of concrete in the farming industry.

LOCOMOTIVES, STEAM SHOVELS AND DREDGES.—American Locomotive Co., New York, N. Y. Paper; 9 × 6 ins.; pp. 31; illustrated.

The company's exhibits at the Alaska-Yukon-Pacific exhibtion at Seattle are illustrated in this pamphlet. They include tank locomotives, a rotary steam snow plow, trucks for electric cars. The pamphlet includes also a steam shovel and dredges of the dipper, ladder and suction types.

BLOCK SIGNALS.—The Hall Signal Co., New York and Chicago. Paper; 5¼ × 8¼ ins.; pp. 21; illustrated.

This pamphlet describes an electric semaphore signal having the motor and mechanism mounted on top of the post, so that it gears directly with the spindle of the signal arm. The mechanical and electrical features are described and illustrated in detail. The motor and mechanism together weigh less than 100 lbs. and are enclosed in a casing about 35 × 10 × 13 ins.

CEMENT PULVERIZER MILL.—Lehigh Car, Wheel and Axle Works, Fullerton, Pa. 6 × 9 ins.; pp. 16; illustrated.

Starting with a reprint from the "Cement Age," entitled "Hydraulic Properties of Reground Cement Mortars," by H. S. Spackman and R. W. Leslie, the larger part of this pamphlet is devoted to a description of the Fuller-Lehigh Pulverizer Mill, which, it is claimed is best adapted to produce that very fine grinding shown desirable by the preliminary paper.

CEMENT.—Universal Portland Cement Co., Chicago, Ill. 6 × 9 ins.; pp. 31; illustrated.

This company has issued under the title "Standard Specifications and Uniform Methods of Testing and Analysis for Portland Cement," the latest reports of the various committees appointed by different societies to standardize the testing of cement. The pamphlet is very complete and should be useful to all cement users.

MINING MACHINERY.—Midvale Steel Co., Philadelphia, Pa. Series 26. Paper; 6 × 9 ins.; pp. 44; illustrated.

The first half of this booklet shows illustrations and concise descriptions of wearing parts for mining machinery, including stamp-mill parts, roll shells, mill spares and crusher spares. A few pages are devoted to cast steel slag pots, slag-car bowls and other smelter castings, and the remainder of the pamphlet contains tables of shrinkages, weights of tires, M. C. B. axle dimension and specifications for steel castings.

STEEL FORMS FOR CONCRETE.—George W. Jackson, Inc., 175-79 West Jackson Boulevard, Chicago, Ill. 10 × 7 ins.; pp. 36; illustrated.

One of the greatest opportunities for the development of concrete construction undoubtedly lies in the devising of some kind of permanent standard and interchangeable form which can be easily set up and as easily dismantled and which can be used over and over again without permanent damage. This kind of form the Jackson Co. claim to have invented. It will pay all concrete workers to look into these claims.

MECHANICAL WATER FILTERS.—American Water Softener Co., Philadelphia, Pa. Paper; 7¾ × 10 ins.; pp. 16; illustrated.

Mechanical water filters of both the pressure and gravity type are here described and illustrated. A gravity filter provided with revolving brakes as agitators, and named after Mr. George F. Hodkinson, is figured. A strainer, or sand valve, named after the same person, is also shown. The pamphlet states that Mr. Hodkinson has been identified with rapid or mechanical filtration since its inception, he having entered the business in 1886 with the Newark Filtering Co., the pioneers in mechanical filtration.

GASOLINE-DRIVEN LOCOMOTIVES.—Milwaukee Locomotive Mfg. Co., Milwaukee, Wis. 6 × 9 ins.; pp. 28.

The locomotives described in this pamphlet are driven by 4-cylinder internal combustion engines, which can be arranged to use either gasoline, alcohol, distillate or kerosene fuels. Chain speed gearing is used in the connection between the engine and the driving wheels, and cone friction clutches of tar fibre are used on the main shaft, through which the engine is reversed. The types of locomotives shown in the catalog vary from 2½ tons to 30 tons in weight, and from 8 ft. to 26 ft. in length. It is stated that locomotives of this type have been in use for about a year, with satisfaction to the users.

ROAD-MAKING MACHINERY.—Port Huron Engine & Thresher Co., Port Huron, Mich.; Minneapolis and New York. Paper; 6¾ × 3½ ins.; pp. 16; illustrated.

This little pamphlet is devoted to a general-purpose road roller which can be used for hauling purposes; to spreading dump cars suitable for hauling and short turning in long trains; and also to road graders, combined sprinklers and engine tenders, crushers and elevators, and portable engines. A feature of the spreading dump cars is the very wide metal wheel-rims. The relative gages of the front and rear wheels are such as to give 20 ins. of road-rolling surface to each side of the road, or 40 ins. in all.

SAFETY VALVES.—Crosby Steam Gage & Valve Co., 93 Oliver St., Boston, Mass., and 21 West Lake St., Chicago, Ill. Two pamphlets. Paper; 6 × 9 ins., pp. 24 and 19.

These pamphlets are entitled "Safety-Valve Efficiency" and "Some Principles of Safety-Valve Design," respectively. Both are reprints of papers by A. B. Carhart, presented before the American Society of Mechanical Engineers. The first contains an exposition of the calculation of safety-valve capacity with Napier's law as a basis and a discussion of maximum practicable valve diameter and of valve lifts. The second pamphlet deals with springs for safety valves. A brief abstract of this was published in Engineering News, March 11, 1909, p. 271.

DRAWING TABLES.—Economy Drawing Table Co., Toledo, Ohio. Paper; 6 × 9 ins.; pp. 48; illustrated.

Drawing tables of a variety of designs are illustrated and briefly described in this catalog. In addition to the standard patterns intended for engineers, architects and contractors, there are shown a number of special tables built for technical and manual training schools. A drawing board is shown of which the main part holding the paper may be turned at any angle with the left hand edge guiding the T-square. The board turns about a pivot located a few inches from the left edge and graduations on a ring along the line of division between the two parts of the board make it possible to set the paper at any desired angle with the guiding edge.

LEVER JACKS.—Joyce Cridland Co., Dayton, Ohio. Bulletin No. 35. Paper; 4 × 9 ins.; pp. 23; illustrated.

Besides giving a description of various jacks of the lever type, manufactured by the Joyce Cridland Co., this booklet also describes in some detail the mechanisms by which many of the automatic features are obtained. The workings of the full automatic jack are fully described and cuts show the various operations. Automatic geared jacks are also described. These jacks are said to have the power and fine adjustment afforded by hydraulic jacks, with none of their failings. The Joyce-Cridland Co. have jacks for every class of work, such as railway, stone yard and automobile jacks, and each one is designed to especially meet the conditions for which it is intended.

DROP FORGINGS.—J. H. Williams & Co., 150 Hamilton Ave., Brooklyn, N. Y. Catalog, 14th edition. Paper; 6 × 9 ins.; pp. 120; illustrated.

The cover design of this attractive publication is an excellent reproduction in colors of a red-hot, drop-forged wrench. About 800 sizes of 40 patterns of wrenches are listed with a range of openings for every size bolt from ⅛-in. to 5-in. inclusive. A number of changes in numbering, dimensions and prices are announced, together with half a dozen new lines of wrenches. A numerical index of the various styles of wrenches has been included. In addition to the wrenches, numerous other forms of forgings are shown, including crank shafts, eye-bolts, caliper gages, etc. Two pages are devoted to an explanation of the purpose and methods of the chemical and physical testing laboratory maintained by this company.

BELT DRESSING.—Joseph Dixon Crucible Co., Jersey City, N. J. Paper; 3¼ × 6¼ ins.; pp. 24; illustrated.

This booklet, entitled "The Proper Care of Belts," is divided into three sections, headed, respectively, Belts; Belt Dressings; and Hints, Kinks, Tables. The first section deals with the running condition of belts, the second takes up treatment with various preparations, and the third, as the title indicates, presents some general information upon belting and its use collected from various sources. It tells what results were secured in a plant where records were kept over a period of years; gives the economical speeds at which leather belts should be run; has some matter telling of the different styles of joints, illustrating three methods of leather lacing; gives horse-power transmitted by various sizes of single and double belts, etc. This booklet is gotten out in the interests of the Traction and Solid Belt Dressings placed on the market by the Dixon company.

AUTOMATIC HIGH-SPEED ENGINES.—American Engine Co., Bound Brook, N. J. Paper; 6 × 9 ins.; pp. 12; illustrated.

The problem of balancing high-speed steam engines is discussed in this pamphlet. It is pointed out that perfectly balancing the ordinary simple engine is an impossibility without the use of reciprocating weights moving at right angles to the piston. It is then shown how an engine can be balanced practically perfectly if two cylinders be arranged at right angles, and a brief description is given of the American angle compound engine in which this idea is incorporated. It is pointed out that the perfect balance obtained makes it feasible to install this engine upon upper floors and in other places where vibration would be objectionable, also that the even turning moment incidentally secured makes it possible to use lighter fly wheels and results in less pressure upon bearing surfaces, besides giving more satisfactory operation of alternating current generators.

WATER-SOFTENING PLANTS.—American Water Softening Co., Philadelphia and Columbus. Paper; 5¾ × 9 ins.; pp. 48; illustrated.

Lime and soda ash are used as reagents in the water-softening plants described in this catalog. The lime is used in the form of milk of lime. A water motor of direct and positive type, patented by the company named, is used to elevate the chemicals after mixture to the chemical-reservoir tank. A valve in the bottom of this tank discharges the solution into an "oscillating reservoir," which tips by the action of gravity when the reservoir is filled, thus discharging the reagent into the softening tank. The oscillation of the reservoir operates the valve in the chemical-reservoir tank above it. The oscillator is always operated by the same quantity of liquid, but the valve which feeds the oscillator can be so adjusted as to regulate the quantity of chemical used. A number of installations by this company are presented by means of half-tone views.

ASPHALTIC PRODUCTS FOR ROAD BUILDING.—The Texas Co., Houston, Tex. Stiff paper; 8 × 5¾ ins.; pp. 14; illustrated.

Besides a brief general discussion of road building, this pamphlet defines briefly three classes of products supplied by the company, all prefaced by the trade name "Texaco": (1) Liquid asphalt, which is said to contain about 30% of asphaltic residuum and which is designed for dust-laying purposes; (2) macadam binder, said to contain 80% of asphaltic residuum and to be "suitable for application with the petrolithic method, the sampittic method and the penetration method of surfacing"; (3) road asphalt, for the production of cold mixtures with stone, or for the building up of road surfaces by the introduction of the binder into the voids of the larger stone, according to any of the various methods adopted.

The percentage of asphaltic residuum in (3) is not given, but it is said that the material at 77° has a penetration of 90 to 110. Ways of using these products are briefly described.

RAILWAY AND TRACK SUPPLIES.—Buda Foundry & Mfg. Co., Railway Exchange, Chicago, Ill. Catalog No. 127. Cloth; 6 × 9 ins.; pp. 423; illustrated.

The large variety of railway supplies shown in this catalog includes water-softening plants, railway motor cars and velocipedes, hand cars, push cars, track drills, car replacers, ratchet and ball-bearing jacks, switch stands, crossing gates, frogs, switches and scales.

Considerable space is devoted to water-softening plants. The descriptions of the intermittent and the continuous systems built by this company are preceded by a discussion of the question of abolishing the use of what is commonly called hard water and of processes for rendering such water soft. There are sectional and photographic views of Buda installations, and finally a few pages expounding the adaptability of water-treating plants and the economies resulting from their use by railways and industrial plants.

As a preface to the pages illustrating the numerous styles of railway motor cars made by this company, there are a few paragraphs stating the advantages and increasing use of motor cars for inspection work and construction and maintenance gangs. The bulk of the book is devoted to illustrations and brief descriptions of Buda products.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56, of Advertisements and Construction News page 34.

SEWER.

OFFICE OF THE COMMISSIONERS OF SEWERAGE OF LOUISVILLE, KY. Incorporated.

Sealed proposals for the construction of a sewer known as Section "B" of the Western Intercepter, Contract No. 49, of the Comprehensive System of Sewerage for the City of Louisville, Ky., will be received at the office of the Commissioners of Sewerage until 12 o'clock noon, August 6, 1909.

The work will consist mainly of building an unreinforced concrete sewer, 3 ft. 6 in. and 5 ft. in diameter, total length about 4,000 ft., and from 12 ft. to 25 ft. deep, and including about 1,875 cu. yds. of concrete.

Plans and specifications may be seen at the office of the Commissioners, and at the office of Harrison P. Eddy, Consulting Engineer, 14 Beacon Street, Boston, Mass.

Sealed bids should be endorsed "Proposal for Section 'B' Western Intercepter," and addressed to the Commissioners of Sewerage, Equitable Building, Louisville, Ky. Each bid must be accompanied by a certified check for at least seven per cent. (7%) of the total amount of the bid, or a "Bidder's Bond," as described in the form of proposal.

W. C. NONES, Chairman.
CHAS. P. WEAVER, Secy. & Treas.
J. B. F. BREED, Chief Engineer.

CANAL CONSTRUCTION.

Scottsbluff, Nebraska.

Bids are requested and will be opened on August 5th by Boyd Ehle, Construction Superintendent, J. G. White & Company, Inc., Scottsbluff, Nebraska, for the construction of main canal and laterals as follows:

Estimated quantities are:

Main Canal—
465,000 cubic yards Earthwork.
37,500 " " Loose-Rock.
37,500 " " Hard-Rock.
1,400 " " Reinforced concrete structures.

Lateral System—
220,000 cubic yards Earthwork.
300 " " Loose-Rock.
1,300 " " Reinforced concrete structures.

Quantities are approximate only.

Bidders will state price per cubic yord for each item. Steel for reinforcement will be supplied by the Company. Bids must be received at the above address before August 5th.

Right is reserved to reject any or all bids.

Further information may be obtained at the above address or on application to J. G. WHITE & COMPANY, INC., 43 Exchange Place, New York.

WATER SYSTEM.

Lamar, Colo.

Sealed bids will be received by the town of Lamar, Prowers County, Colorado, at the office of the Clerk of said town up to 8.00 o'clock P. M., Aug. 9th, 1909, for the construction of Sec. No. 2, and Sec. No. 3 of its proposed Water System. Sec. 2 consists of 9 miles of vitrified pipe line. Sec. No. 3 of a wood covered concrete reservoir 12 feet deep and 230 feet square; $1,000.00 certified check required with each bid to guarantee sincerity.

Deposit of $5.00 will be required on plans for each section to guarantee return of the same.

J. F. CURRY, Clerk.

OFFICE, COMMISSIONERS, DISTRICT OF COLUMBIA, July 15, 1909.—Sealed proposals will be received at this office until 12 o'clock noon, Saturday, August 7, 1909, for furnishing 200 fire hydrants. Forms of proposals, specifications and necessary information may be obtained from Chief Clerk, Engineer Department, Room 427, District Building, Washington, D. C. HENRY B. F. MACFARLAND, HENRY L. WEST, WM. V. JUDSON, Commissioners, D. C.

PAVING.

Lansdowne, Pa.

Sealed proposals will be received by the Borough Council of Lansdowne, Delaware County, Pennsylvania, at 8:30 P. M., Friday, August 6, 1909, at the Council Chamber, Lansdowne, for the paving of Baltimore avenue, from Shadeland avenue to Union avenue, the approximate quantities of the work to be done are as follows: 21,000 square yards of pavement, 7,500 cubic yards of excavating.

Bidders to submit bids for bitulithic pavement, also for repressed vitrified shale or fire clay blocks, all paving to be upon concrete foundations, according to borough specifications.

Specifications for above work can be procured from Borough Engineer T. C. Janvier, Lansdowne, also Borough Secretary John W. Davis, 149 South Front street, Philadelphia, Pa.

All bids must be accompanied by a certified check for $3,000 and envelope endorsed bids for paving Baltimore avenue.

Council reserves the right to reject any or all bids or part thereof or to accept any separate item or items of any bid.

JOHN W. DAVIS, Secretary, Lansdowne Borough.

STONE ROAD.

Camden, N. J.

Sealed proposals are invited for building a stone road 14 feet wide from White Horse Stone road to Browns corner, a distance of 1.629 miles, of either Amiesite or Asphalt Macadam, in accordance with plans and specifications on file at the office of State Commissioner of Roads, Trenton, N. J., also at office of Clerk of Board.

Bids will be received, immediately opened and publicly read at a meeting of the Board, in the Court House, Camden, N. J., Wednesday, August 11, 1909, at 11 A. M.

Each bid must be accompanied by a certified check in the sum of $1,000 as a guarantee of good faith on part of bidder.

The Board reserves the right to reject any or all bids.

Dated Camden, N. J., July 20, 1909.

ALFRED L. SAYERS, Director.
J. J. ALBERTSON, County Engineer.

PAVING.

Hornell, N. Y.

Sealed proposals will be received by the Board of Public Works at the office of the City Clerk of Hornell, N. Y., until 3 p. m., Monday, August 2, 1909, for grading, curbing and paving with vitrified brick or block on concrete foundation, Genesee Street, between Church and Pearl Streets.

Plans and specifications may be seen at the office of the Board of Public Works, where proposal sheets may be obtained by bidders.

Approximate quantities are: Excavation, 1,578 cu yds.; pavement, 4,942 sq. yds.; curbing, 3,114 lin. ft.

M. E. CHESEBRO, Acting Supt. Pub. Wks.

SEWERS.

Rahway, N. J.

Sealed proposals will be received by the Common Council of the City of Rahway, N. J., until Tuesday, August 3, 1909, at 8 o'clock, P. M., for the construction of 4,300 feet of vitrified tile pipe sewers, with laterals, manholes and basins, sizes 10-inch to 30-inch.

Plans and specifications, etc., may be examined at the office of the City Clerk after July 30, 1909.

FRANKLIN MARSH, City Engineer.

OFFICE, COMMISSIONERS, DISTRICT OF COLUMBIA, Washington, July 12, 1909.—Sealed proposals will be received at this office until 12 o'clock noon, Saturday, July 31, 1909, for removing the Old Anacostia Bridge across the Anacostia river at foot of Eleventh street, S. E., Washington, D. C. Forms of proposals, specifications and necessary information may be obtained from Chief Clerk, Engineer Department, Room 427, District Building. HENRY B. F. MACFARLAND, HENRY L. WEST, WILLIAM V. JUDSON, Commissioners, D. C.

STONE ROAD.

Camden, N. J.

Sealed proposals are invited for building a stone road 14 feet wide from Blackwoodtown Turnpike to East Gloucester, a distance of 1.237 miles, of either Amiesite or Asphalt Macadam, in accordance with plans and specifications on file at the office of State Commissioner of Roads, Trenton, N. J., also at office of Clerk of Board.

Bids will be received, immediately opened and publicly read at a meeting of the Board, in the Court House, Camden, N. J., Wednesday, August 11, 1909, at 11 A. M.

Each bid must be accompanied by a certified check in the sum of $1,000 as a guarantee of good faith on part of bidder.

The Board reserves the right to reject any or all bids.

Dated Camden, N. J., July 20, 1909.

ALFRED L. SAYERS, Director.
J. J. ALBERTSON, County Engineer.

PROPOSALS FOR DREDGING AND WHARF CONSTRUCTION; MACADAM ROADS, AND SEWER AND WATER EXTENSIONS: War Department, Office of the Constructing Quartermaster, New London, Conn., July 20, 1909.—Sealed proposals for the following mentioned work (separate proposals for each job), will be received here until 10 a. m., August 14, 1909, and then opened. A—Dredging approximately 127,000 cubic yards at Fort Terry, N. Y.; B—Wharf construction at Fort Terry, N. Y.; C—9,000 linear feet, more or less, of Macadam Roads at Fort Terry, N. Y.; D—5,463 feet of six and ten-inch sewer, and 551 feet of four-inch water extension at Fort Terry, N. Y.; E—Approximately 1,000 linear feet of Macadam Roads at Fort Michie, N. Y. Information furnished on application. Envelopes containing proposals should be endorsed to show their contents and addressed: Capt. Charles T. Baker, Qr. Mr., U. S. Army, Constructing Quartermaster, New London, Conn.

U. S. ENGINEER OFFICE, Kansas City, Mo., July 13, 1909.—Sealed proposals for construction of about 8,260 feet pile dikes and 4,000 feet revetment, on Missouri river, between Kansas City and mouth, will be received here until 12 noon, August 16, 1909, and then publicly opened. Information furnished on application. EDWARD H. SCHULZ, Major, Engrs.

U. S. ENGINEER OFFICE, Federal Building, Dallas, Tex., July 10, 1909.—Sealed proposals for construction complete wooden snagboat will be received here until 12 m., August 10, 1909, and then publicly opened. Information on application. A. E. WALDRON, Capt., Engrs.

Situations Wanted

Civil Engineers.

CIVIL ENGINEER (30), Swiss graduate, 6 years' experience in railroad construction, irrigation, harbor development, designing for hydro-electric power plants; at present employed by big western power company, wishes change; good references. Address "S. B. 4," Engineering News, New York. 4-2t

CIVIL ENGINEER, graduate, single; nine years' good experience in designing and construction of water-works, water power, sewerage, street railway and reinforced concrete; have produced results in charge of important construction both as engineer and superintendent; at present employed; will furnish details of experience and excellent references upon request. Address "Z. B. 4," Engineering News, New York. 4-1t

CIVIL ENGINER, graduate, desires position; had responsible charge of surveys of all kinds, municipal improvements, real estate developments, and railroad construction; also draftsman and expert computer. Address "O. A. 4," Engineering News, New York. 4-6t

Superintendents, Misc., etc.

ERECTION FOREMAN, fifteen years' successful experience in charge of steel bridge and building construction, foundations, concrete and reinforced concrete work, desires position; can repair wrecked bridges and erect heavy machinery. Address BOX 749, Wichita, Kansas. 4-4t

ASSISTANT TO CONTRACTOR or engineer is open for engagement; technical graduate; seven (7) years general experience; at present in business for himself as contracting engineer; owing to small capital will consider proposal to become associated with older contractor in New York or vicinity. Address "L. A. 4," Engineering News, New York. 4-1t

ENGINEER (33) open for engagement; mill and machinery construction; will take charge of designing office or shops; experience as chief draftsman and construction engineer with large concern; practical mechanic; best references. Address "J. 4," Engineering News, 1636 Monadnock Block, Chicago. 4-1t

Situations Open

WANTED—By railroad under construction in middle South, college graduate experienced in design steel and masonry bridges and railroad buildings. Salary, $100 to $125. Give full details in replying, including sample of work. ENGINEER OF BRIDGES & BUILDINGS, C. C. & O. Ry., Johnson City, Tenn. 4-1t

STRUCTURAL DRAFTSMEN, familiar with truss work and general building construction. Salary, $22 a week. State experience. Address "D. B. 4," Engineering News, New York. 4-1t

WANTED—Master Mechanic for large pumping station; must be first-class machinist and familiar with water-tube boilers and Corliss engines. Apply by letter, giving age, education and experience. Address "A. 3," Engineering News, New York. 4-1t

STRUCTURAL DRAFTSMAN WANTED for detailing beams and columns for buildings. Address "E. B. 4," Engineering News, New York. 4-2t

STRUCTURAL ENGINEER wanted who has had responsible charge of making and checking construction details for buildings. Give education, age, and experience, or apply at office between five and six P. M. TURNER CONSTRUCTION COMPANY, 11 Broadway, New York City. 4-1t

WANTED—Several structural draftsmen and checkers. Apply in person. NATIONAL BRIDGE WORKS, Review Ave., Long Island City, N. Y. 4-2t

WANTED—Technical graduate with experience in designing and estimating steel structures. State experience. Address "F. B. 4," Engineering News, New York. 4-1t

Miscellaneous Wants

WANTED—Partner in civil engineering and surveying in territory; small amount capital required. Address 'H. S.," Westbury, L. I. 4-1t

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River Avenue, Northside, Pittsburg, Pa. 4-1t

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